

JUSTICE IN HEALTH CARE: BEYOND THE
TREATMENT/ENHANCEMENT
DISTINCTION

by

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ABSTRACT

I contend that the treatment/enhancement distinction is inherently only able to provide limited aid to arguments in bioethics concerning ethically controversial issues of resource distribution. Rather, normative assumptions about concepts such as human functioning, normality, health, and/or disease that the treatment/enhancement distinction relies on are the primary ethical motivators in distributive justice arguments that consider some medical intervention to be treatment and some medical intervention to be enhancement. Therefore, if arguments are to use the treatment/enhancement distinction to draw conclusions about justice in health care, they must make additional normative assumptions about human functioning and the role of health care. These distributive justice arguments then rely on the additional normative assumptions about human functioning and the role of health care to draw conclusions about treatment and enhancement. Arguments using the treatment/enhancement distinction have not, however, acknowledged these additional normative assumptions.

In this dissertation, I make the argument that the treatment/enhancement distinction is not an independent concept. Additionally, I examine ways to cohesively fit consideration for individuals

who seek medical intervention for enhancement purposes into accounts of just health care. To do this, I examine arguments concerning growth hormone therapy, performance enhancing drugs, and cognitive enhancement.

TABLE OF CONTENTS

ABSTRACT.....	iii
ACKNOWLEDGMENTS.....	viii
Chapters	
1. INTRODUCTION.....	1
Dissertation Goals.....	3
Summary of Chapters.....	5
PART I THE TREATMENT/ENHANCEMENT DISTINCTION.....	9
2. THE TREATMENT/ENHANCEMENT DISTINCTION REVEALED.....	10
Part 1: Boorse on Functionalist Accounts of Disease and Health.....	12
Daniels' Account of Justice in "Just Health Care".....	19
Daniels' Account of Justice in "From Chance To Choice".....	23
Daniels on the Treatment/Enhancement Distinction.....	25
Prioritarianism.....	28
Criticisms of the Treatment/Enhancement Distinction.....	33
Part 2: Case Study: Surgical Leg Amputation.....	35
Conclusion.....	38
3. JUSTLY DISTRIBUTING RESOURCES: A GROWTH HORMONE THERAPY CASE STUDY.....	40
Availability of Growth Hormone.....	44
GHD, ISS, and the Short-Statured.....	47
Equality.....	54
Diagnosis-Based Arguments.....	56
Diagnosis-Based Arguments and Clinical Trials.....	57
Enhancement Research on Non-GHD Children.....	61

Medicalizing Short Stature.....	64
Conclusion.....	67
Endnotes.....	71
PART II WHAT IS ENHANCEMENT?.....	72
INTRODUCTION.....	73
4. SPORTS AND ENTERTAINMENT: DIFFERENCES IN PERFORMANCE ENHANCING DRUG POLICIES.....	75
Part 1: Setting the Stage.....	79
What Is Sport and What Is Entertainment?.....	81
Part 2: Arguments for Regulation.....	85
Fairness in Competition.....	85
“Rules of the Game”.....	86
“Norms of the Game”.....	89
“Normal Risks”.....	90
What is Human Excellence?.....	96
Conclusion.....	100
Endnotes.....	105
5. COGNITIVE ENHANCING PRACTICES: CHALLENGES TO IDENTITY AND AUTHENTICITY.....	107
Biological and Nonbiological Dilemmas.....	109
Fast and Easy Remedies.....	112
Prioritarianism.....	117
Discussion.....	120
Identity, Personhood, and Authenticity.....	122
Discussion.....	125
Conclusion.....	127
6. CONCLUSION.....	130
Arguments.....	131
Natural Inequalities.....	132
Social and Professional Environments.....	133

Acceptable and Unacceptable Risks.....	134
Implications for Justice in Health Care.....	136
REFERENCES.....	138

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CHAPTER 1

INTRODUCTION

Arguments concerning the just allocation of medical resources embody a central concern of bioethics: What are just ways to treat patients? In bioethics, a common way to ground arguments for particular distributive justice standards is to utilize what the literature calls the treatment/enhancement distinction. The treatment/enhancement distinction is a distinction between medical intervention that health care policies, medical insurance policies, and some bioethicists consider to be medically necessary, or required for health, from medical intervention that is considered to be medically unnecessary, or not required for health.

Medical intervention that aims to restore, maintain, and/or improve health by preventing or curing a condition, impairment, illness, or disease is typically considered “treatment” (Buchanan et al., 2000; Colleton, 2008). Explanations of treatment may be followed by the claim that individuals who are thought to be seeking treatment ought to be prioritized over individuals who are thought to be seeking enhancement. Enhancement is typically considered to be medical intervention that aims to improve health and/or

human abilities beyond what is considered normal human functioning (Buchanan et al., 2000, Colleton, 2008).

Advances in biotechnology create new, advanced ways in which we can enhance our lives. Along with older, more traditional practices, we now also have new and advanced practices to help us end the ways in which we physically, emotionally, and mentally suffer from our ailments, shortcomings, and inabilities. We can enhance our muscle tone, our vision, and our cognitive capabilities by using biotechnology; however, reasonable precautions about how and who is taking advantage of enhancement practices are necessary to ensure that the goals of medicine as a profession are accomplished, that patient safety is protected, and that patients are treated fairly, among other reasons that I discuss in this dissertation.

The wide availability of numerous enhancement practices and the limited availability of other enhancement practices and their possible contributions to class, economic, intellectual, and physical inequalities, create the need to manage the distribution of enhancement practices. Yet we must be cautious without being overly limiting. Accounts of just health care typically favor medical intervention for individuals seeking treatment, rather than individuals seeking enhancement. The contentious nature of what medical intervention is considered treatment and what intervention is considered enhancement, however, and on what grounds this distinction is made, cannot be overlooked in determining how to implement practices that

ensure justice for individuals seeking treatment as well as individuals seeking enhancement.

In this dissertation, I argue that the treatment/enhancement distinction is not an independent concept. Therefore, it cannot be used by distributive justice arguments that draw conclusions other than the conclusion that some uses of medical intervention are treatment and some uses of medical intervention are enhancement. Stronger arguments are beyond the scope of the treatment/enhancement distinction alone. Stronger arguments that distinguish between treatment and enhancement must first make normative claims about what is disease, what is health, what is proper human functioning, and what is the role of medicine. Throughout this dissertation, I examine functionalist, empirical, and etiological explanations of disease and health. I then show how these explanations influence conclusions that distinguish between treatment and enhancement.

Dissertation Goals

The principal goal of this dissertation is to present arguments that utilize the treatment/enhancement distinction to draw conclusions about what is just health care and to then show how explanations of other concepts are the main ethical motivators in these arguments. A corollary goal of this dissertation is to show the difficulty of separating many instances of treatment from enhancement; however, many theories of just health care

continue to separate these two types of medical intervention for purposes including distributive justice in the practice of medicine and minimization of the financial costs of health care. Although these may be legitimate reasons to distinguish between treatment and enhancement, these reasons have to be weighed against the needs of individuals and the likelihood of individuals benefiting from medical intervention.

Other than utilitarian accounts of the treatment/enhancement distinction, accounts of just health care typically make the needs of individuals seeking enhancement secondary to the needs of individuals seeking treatment. Contrary to these accounts of just health care, an additional goal of this dissertation is to show that a theory of just health care must include ways to ensure justice for individuals seeking enhancement when it is difficult to clearly distinguish treatment from enhancement and the medical intervention at issue is considered to be safe.

Although there may be some instances when it is easy to distinguish between treatment and enhancement, using the treatment/enhancement distinction to address medical intervention is ethically arbitrary in at least one instance—when individuals seeking what medical institutions consider to be enhancement experience the same state of being that is regarded as problematic as individuals seeking treatment. This means that as a matter of justice, the needs of some individuals seeking enhancement ought not to be prioritized below some individuals seeking treatment and individuals seeking

enhancement ought to at least be given consideration in accounts of just health care.

Summary of Chapters

This dissertation is split into two parts. In Part I, I focus specifically on the treatment/enhancement distinction and the concepts it relies on and examples of how the treatment/enhancement distinction is used in arguments concerning distributive justice.

I begin with Chapter 2. In it I discuss the necessary concepts that are related to the treatment/enhancement distinction. I then discuss how these concepts are utilized by equal opportunity and prioritarian accounts of just health care. I then discuss how each account of just health care addresses the treatment/enhancement distinction and how it is used to draw conclusions about how to justly allocate medical resources. I conclude this chapter by using a case study to show the difficulties of only using the treatment/enhancement distinction to determine acceptability of intervention and how other concepts, as used by accounts of just health care, are necessary to draw conclusions in bioethics.

In Chapter 3, I discuss one of the most common examples of the treatment/enhancement distinction in arguments concerning just health care: growth hormone (GH) therapy distributed to two children of equal height—‘child GHD’ with a growth hormone deficiency (GHD) as a means of

therapeutic intervention and GH therapy distributed to ‘child short’ who is not GH deficient as a means of enhancement. In Chapter 3, I present the different treatment of these two children to demonstrate the common argument that because a normal short child uses GH for enhancing purposes, she should not be allowed to have GH treatment. There is research that claims that GH treatment can increase the adult height of children without GHD to a height that they could not have reached without medical intervention. There are also examples of children without GHD who are of the same height as children with GHD. Despite both the research and these examples, some arguments still conclude that children without GHD are not entitled to GH therapy, as a matter of just health care. I also present examples in which the treatment/enhancement distinction is not the driving force in these kinds of arguments. Instead, normative assumptions about what conditions are diseases, what is proper human functioning, and what is the proper role of health care are the normative claims that motivate what are commonly referred to as diagnosis-based arguments. I use the GH therapy example as a way to highlight a just health care dilemma—whether we should focus on the presence of disease to determine entitlement to treatment or on the shared height of individuals with and without disease when determining obligations to medically intervene.

In Part II of this dissertation, I focus on justice for individuals seeking to use medical resources for what health care considers enhancement and the

arguments employed to support the use of enhancement practices in particular settings. I also examine ways in which individuals seek enhancement practices to attain goals or to better their lives. By examining these uses of enhancement, I show the importance of context when making decisions about what practices are considered enhancement and treatment. Although the treatment/enhancement distinction sometimes aligns with the distinction between permissible and impermissible, there are occasions when they do not align.

In Chapter 4, I examine the use of performance enhancing substances in sports. I then abstract the use of these substances from the common arena of sports and examine their use in entertainment, or the performing arts. Comparing the use of performance enhancing substances in sports to their use in entertainment highlights the contextual nature of determining what practices are considered enhancement. Subsequently, this comparison also highlights other relevant information that influences judgments concerning the acceptability of performance enhancing substances, including a sense of fairness and level playing fields.

In Chapter 5, I examine some of the major objections to the use of different types of biological and nonbiological cognitive enhancing practices. I contend that these objections must be addressed in relation to normally and abnormally functioning individuals because of the potential contributions to

social and financial advancements, and the personal growth that both types of cognitive enhancement practices can offer.

In Chapter 6, I conclude this dissertation with a review of the arguments that apply to all types of enhancement practices that I discuss in this dissertation. I also discuss what these arguments imply for just health care. Lastly, I discuss the importance of focusing on the undesirable effects of disease and ailments that make individuals seeking enhancement similar to individuals seeking treatment rather than focusing on the diagnoses that separate these two groups of individuals.

PART I

THE TREATMENT/ENHANCEMENT DISTINCTION

CHAPTER 2

THE TREATMENT/ENHANCEMENT DISTINCTION REVEALED

A goal of this dissertation is to examine arguments that utilize the treatment/enhancement distinction and to reveal the other concepts that the arguments employ to make claims about what medical intervention is considered treatment or enhancement. A corollary goal is to present ways that some individuals seeking medical intervention for purposes of enhancement can have their needs met within particular accounts of just health care.

My goal is not to claim that there are no differences between treatment and enhancement practices. My goal, however, is to provide a philosophical analysis of the treatment/enhancement distinction that reveals the normative assumptions about the role of health care, what conditions are considered diseases, and what states of being are considered healthy that are used in judgments about whether a medical intervention should be characterized as treatment or enhancement.

This chapter is divided into two parts. In Part 1 of this chapter, I

present prevalent accounts of disease, health, and human functioning. I also discuss how several important nonutilitarian and egalitarian accounts of just health care employ these concepts. In Part 2, I present an example of an individual's two uses of medical resources. I then show how drawing conclusions about whether her use of medical resources can be thought of as treatment or enhancement depends on employment of the concept of normal functioning.

In "Health-Care Needs and Distributive Justice," Daniels (1981) states that a theory of health care needs should capture the ways in which health care might be "special" and ought to be distributed in a just manner. Furthermore, to determine the ways in which health care might be special, we ought to compare it to other social goods that we find important and have already determined how to distribute justly. In addition, a theory of health care needs should allow us to distinguish between more important health care services and less important health care services. Our task as Daniels sees it is to provide a philosophical analysis of why health care is special and what distinctions can be made about the services health care provides (Daniels, 1985, 1981). This chapter, and my dissertation as a whole, takes on an aspect of this task. My first step is a philosophical analysis of accounts of health care and what we want accounts of health care to do for us.

In this chapter, I commonly refer to "accounts of just health care" to include a wide range of claims. Where distinctions among these claims are

needed for my argument, these distinctions are made. As a general matter, I use “accounts of just health care” to refer to a family of claims about the duties of health care personnel to properly distribute their time, knowledge, services, and resources to individuals and who should be financially responsible for the distribution of these goods. “Accounts of just health care” will also refer to general accounts about just (or proper) ways to treat individuals and to particular claims about just (or proper) ways to treat individuals, which are both used as a basis for how medical institutions ought to treat individuals. For instance, an account of just health care may state that health care personnel are obligated to prioritize individuals who desire what their profession or institution considers to be treatment before individuals who desire what their profession or institution considers to be enhancement based on conceptions of effective hospital management. Based on the criteria for a proper philosophical analysis of health care theories set forth by Daniels (1981), this chapter explores how various theories meet his criteria and expands the requirements for what we want a theory of health care to do for us.

Part 1: Boorse on Functionalist Accounts of Disease and Health

Theories of just health care often rely upon an account of normal in which normal is an evaluative concept explained in terms of cultural or ethical norms (Wachbroit, 1994). Theories of health care also often rely upon

more prominent accounts of health and disease in which both are defined in terms of human function. For example, etiological explanations of function state that the proper function of a part is explained by what actions the part was naturally selected to perform (Millikan, 1989; Wright, 1973). Given this etiological approach, when the body, or its parts, are performing the actions that it was naturally selected to perform, it can be thought of as healthy and when the body is not performing the actions it was naturally selected to perform, it can be thought of as diseased. This would be the case when a heart is not properly pumping blood, the action it is thought to be designed to perform.

In this section, I will discuss a functionalist account of health and disease as described by Boorse (1975, 1977). I focus on Boorse because the treatment/enhancement distinction, which is the primary target of this dissertation, operates in just health care arguments as a tool to designate individuals' levels of function and then to separate individuals based on that level of functioning and lastly to determine obligations to treat based on those designations. Then I will discuss what relying on Boorse's account of health and disease means for the treatment/enhancement distinction.

In his functionalist accounts of health and disease, Boorse (1975, 1977) uses explanations of normality and proper functioning to distinguish disease from health. According to Boorse (1975, 1977), the body has goal-oriented parts and when those parts are functioning normally, or according to their

biological function as determined by factors unique to the individual such as age or sex, the body can be thought of as being healthy. Conversely, when the body or the parts that comprise it deviate from normal functioning, the body or its parts can be thought to have a disease. Under Boorse's theory of health and disease it seems plausible that a part of the body can function abnormally without the entire body of the individual and the body's other parts being thought to be unhealthy.

Boorse's account of health, simply put, is that health is proper functioning and disease is abnormal functioning. This is a very simplistic view; however, it is at the minimum a way to distinguish between cases when it is easy to distinguish between treatment and enhancement. That is, Boorse's view can be used to make the distinction when there are few factors that would lead health care personnel to believe that an individual is using health care resources to function beyond normal or for intervention that is medically unnecessary.

Benditt (2007) gives a more recent account of disease that is similar to Boorse's account of disease. Benditt's account is grounded in an idea of normal function in which body parts have particular functions and these functions have a range of activity. When the body does not function within a particular range, the body cannot complete its biological function, making the body biologically abnormal, or diseased. As Benditt states, some scholars like Alice Dreger (1998) and Anita Silvers (1998) worry that defining disease as

abnormal functioning can easily turn any difference in function into a disease. A further concern is that defining disease as abnormal functioning leads to the assumption that any time an individual is functioning differently, we assume that she must be treated and her functioning restored to normal.

Explaining disease in terms of abnormality and in turn health in terms of normality, however, is not problematic in Benditt's view (2007). He contends that Dreger and Silvers' concerns only arise when from "abnormal" we draw the inference "must be fixed." Although Benditt (2007) concludes that explanations of normal ought not to determine the role of medicine, he acknowledges that they have been taken to do so in some cases. For example, he acknowledges the argument that explanations of normal ought to determine the outer boundaries of medicine, in particular the argument that enhancements are beyond the scope of medicine's obligations. Additionally, Benditt (2007) concludes that explanations of normal may be useful in some areas of life, such as creating the boundaries of athletic competitions within which athletes must compete. In athletic competitions, normal refers to athletes whose abilities are not aided by enhancements, thus making competition interesting to audiences. In athletic competitions, athletes who are not enhanced by drugs ensures the type of competition that spectators want to see. Although Benditt (2007) sees a place for normal in athletic competitions, he remains unconvinced that explanations of normal ought to

determine the boundaries of medicine and the obligations of medical personnel.

According to Schwartz (2007), functionalist accounts of human functioning that invoke the concept of normality and abnormality must address what he refers to as the “line drawing problem.” The “line drawing problem” is questioning where to draw the line between low normal function and dysfunction. Functionalist accounts of human functioning do not adequately address this problem because they rely on a conceptual analysis approach to explaining the differences between normal and abnormal; however, a conceptual analysis focuses on unreliable and continuously changing lingual norms (Schwartz, 2007).

Schwartz (2007) proposes his own solution to the “line drawing problem” known as the “frequency and negative consequences approach” (FNC). This approach draws a line between low normal function and dysfunction based on a statistical analysis of the level of functioning in a reference class and the negative consequences that result from a particular level of functioning. Schwartz represents one such account of normal functioning that can respond to the line-drawing problem, a statistical approach.

This section has presented several selected accounts of common concepts in bioethics, including disease, health, normality, and human functioning. Some accounts focus on the function that body parts were designed to perform, while other accounts focus on how individual functioning deviates

from human functioning that is typically found in the general population. When the treatment/enhancement distinction is employed by just health care arguments, it is frequently used to determine health care's personnel's obligations to patients. However, to employ the treatment/enhancement distinction, accounts of who are healthy and who are unhealthy must first be employed. This is what accounts of health and disease, like those given by Boorse, do for just health care arguments.

Relying on this brief sketch of Boorse's accounts of health and disease, the treatment/enhancement distinction becomes a distinction between ameliorating disease and improving upon an already healthy body. Boorse's account of health and disease supports this traditional explanation of the treatment/enhancement distinction; however, as this dissertation argues, that does not lead to the conclusion that individuals without disease or ailments ought not to use enhancement practices. Just as Boorse (1975, 1977) states that an abnormality of function does not necessitate treatment, normality of function ought not to be the only basis for denial of treatment. Throughout the main chapters of this dissertation, I examine arguments that utilize a functionalist account of health and disease, like Boorse's account, to draw conclusions about treatment and enhancement. I then argue that functionalist accounts exclude individuals from medical intervention who may have a legitimate claim to resources based on other factors such as social disadvantages.

In the next section, I canvass several accounts of just health care that employ Boorse's functionalist account of health and disease to distinguish between health and disease. The treatment/enhancement distinction is understood differently in different theories of justice, depending on the conclusions they are used to draw.

For example, Daniels' (1985, 2001) account of just health care is defined in terms of providing care that affords individuals the greatest opportunity to experience the normal opportunity range for the society in which they live over an ordinary life span (Daniels' account of normal opportunity range includes the necessity for social goods such as education, food, and adequate housing, and other goods; although I mention this aspect of Daniels' account, my priority is the contribution that health care makes to normal opportunity range).

Daniels' account of just health care relies heavily on accounts of normality when understanding the normal opportunity range as a basis for resource distribution. In the discussion that follows, I also include a prioritarian account of just health care that takes justice in distribution to begin with the worst off. Important versions of this account also rely on accounts of disease, health, and normal functioning to make decisions about how to justly distribute resources. These are only two of the nonutilitarian accounts in the literature; however, they are prominent, frequently cited accounts of how health care institutions and personnel ought to treat

individuals. In addition, important versions of the accounts make central use of the treatment/enhancement distinction, my target in this dissertation.

Daniels' Account of Justice in "Just Health Care"

In his well-known account of "Just Health Care" (1985), Norman Daniels utilizes Boorse's account of disease and health to draw conclusions about what justice requires in health care. Daniels' account of just health care relies on the idea that there is a normal range of opportunities for individuals in a given society. The normal range of opportunities consists of those opportunities, or life plans, that are available to individuals with ordinary talents (Daniels, 1985).

Health care is a special kind of good because of its potential to support or hinder our range of opportunities. Institutions that provide adequate and efficient health care can keep individuals healthy and can treat us when we are unhealthy. Since health is necessary for many of life's activities, health care institutions and their resources are desirable; however, on occasion the demand for these resources outweigh the supply of these resources. According to Daniels (1985), because of health care's special relationship with our opportunities, we are required to find a way to justly distribute its limited resources to individuals. These resources include interventions, goods, and the personnel that provide these goods and interventions.

Daniels (1985) continues his argument with a functionalist account of how health care institutions can protect our normal range of opportunities. Health care institutions can protect our normal range of opportunities by maintaining or restoring a normal level of species-typical functioning. Species-typical functioning is a range of bodily functioning that is thought to be normal among humans and by which the normality or abnormality of functioning of individuals can be judged.

Relying on the concept of species-typical functioning allows us to determine what justice in health care requires, which is ensuring a normal range of opportunity for species-typical functioning individuals. Not all opportunities are available to each of us. Key characteristics of a particular society will influence what opportunities are available as different societies have different ranges of opportunities based on their resources. In Daniels' (1985b) view, the principles of justice that regulate a society's basic institutions also affect available opportunities (1985b). Factors such as education and wealth are also factors that can limit opportunities. Disease is another factor that can limit the range of opportunities that are open to particular individuals given their skills and talents (Daniels 1985b). Health care institutions, however, can limit the effects that disease has on these opportunities. Again, this is why health care is special and requires accounts of what individuals ought to use its resources and how they are to use them.

Daniels' (1985, 1985b) initial accounts of just health care include the idea that disease threatens opportunity, so as a matter of justice, health care ought to rectify the ways in which disease hinders access to the normal range of opportunities for some individuals (Daniels 1985b). Daniels (1985b) is careful to note that his account is not based on leveling up or down—he is not advocating that we attempt to equalize everyone's abilities or opportunities. Instead, Daniels (1985b) states that his account of just health care is that everyone's opportunities should equally not be adversely affected by disease when disease can be corrected. Ultimately, Daniels (1985b) concludes that if it is a matter of justice to maintain equality of opportunity, then equality of opportunity, as a principle of justice, must govern the very institutions whose distribution of resources affect our opportunities, which includes health care institutions.

The idea that health care is special because of its effects on our opportunities, defined in terms of species-typical functioning, spans both Daniels' earlier (ca. 1985) and later accounts of just health care. Daniels' later accounts of justice in health care, however, expand on this idea and create an account of just health care that is more inclusive in what it requires. In what follows, I use the example of genetic enhancement to demonstrate the evolution of Daniels' account of just health care.

In "Just Health Care" (1985), Daniels utilizes Boorse's functionalist account of disease and health to state that as a matter of justice, the primary

duty of health care institutions is to maintain or restore individuals to species-typical functioning and to ameliorate disease in so far as it causes individuals to deviate from normal functioning, which in turn limits their opportunities. Natural inequalities that do not adversely impact our species-typical functioning, however, are beyond the scope of health care institutions' duties.

For example, as a requirement of justice health care, institutions would be required to ameliorate congenital brain disorders, such as megalencephaly, a condition in which individuals have an abnormally enlarged brain. For some individuals, it is a genetic disorder that can lessen intellectual capabilities. Although some individuals with megalencephaly may not have severely limited intellectual capabilities, if those intellectual capabilities are below normal species-typical functioning, then they ought to be ameliorated by health care's resources to the extent possible. If individuals with megalencephaly have intellectual capabilities that are lessened but not below normal species-typical functioning, however, then health care institutions are not obligated to intervene. This may be the case when individuals with megalencephaly have a fairly good memory, but do not have an exceptional memory that many other individuals desire and indeed may have. It is normal species functioning to have an average memory and it is beyond normal species functioning to have an exceptional memory; therefore, it is not the responsibility of health care institutions to restore or maintain

exceptional memory skills. Next, I place this example within the context of Daniels' more recent accounts of just health care.

Daniels' Account of Justice in "From Chance to Choice"

"From Chance to Choice" (Buchanan et al., 2001) adopts Daniels' idea that as a matter of justice, health care institutions should remedy the ways in which disease hinders opportunities, in which disease is defined in terms of abnormal species-typical functioning. As many diseases have a known genetic component, health care institutions must be concerned with genetic intervention as well. Genetic intervention is a means to ameliorate disease and therefore a means to ensure individuals' normal range of opportunities. New technology that allows us to genetically alter human life forces us to expand the types of ethical questions that we must ask concerning genetic intervention. Concerns associated with genetic intervention also include the problem of natural inequalities.

Buchanan and others (2001) canvass different responses to whether natural inequalities ought to be altered as a concern of justice, including the equality of opportunity view endorsed by Daniels and an egalitarian view. They ultimately endorse a moderate view that encompasses aspects of both equality of opportunity views and egalitarian views that converge to create the idea of a "genetic decent minimum." Their account of just health care does not include the strict elimination of all natural inequalities. Rather, their

account of just health care, with the idea of “genetic decent minimum” requires that we use genetic intervention to ameliorate disease and to ameliorate severe disabilities that adversely affect our normal range of opportunities. Additionally, if there are genetic conditions that are not considered diseases, yet adversely affect the ability to enjoy the normal range of opportunities, then genetic intervention for practices other than therapeutic intervention is an acceptable use of health care’s resources.

Referring back to the example of megalencephaly, Daniels’ later accounts of just health care offer a different justification for medical intervention. Based on an opportunities approach, individuals with megalencephaly who are functioning below normal species-typical functioning ought to be treated by health care institutions. For example, genetic intervention is acceptable because abnormal functioning is a threat to individuals’ with megalencephaly ability to live the kinds of lives that they want to live. In the instance that individuals with megalencephaly have only a fairly good memory, then genetic enhancement is permissible within Daniels’ account of just health care presented in “From Chance to Choice” (Buchanan et al., 2001). Daniels’ later accounts of just health care are thus much more inclusive than the earlier accounts. This means that more instances of genetic intervention are acceptable and that in some instances, health care’s resources may be used to raise individuals beyond normal functioning. This use of health care’s resources is justified, based on the idea

that abnormal functioning limits opportunities that the individual would otherwise have if it were not for disease.

This section is not meant to be an exegesis of Daniels' account of just health care, although it does give us a starting point for how Daniels' extensive work deals with the treatment/enhancement distinction. Next, I give a synopsis of how the treatment/enhancement distinction functions in Daniels' account of just health care.

Daniels on the Treatment/Enhancement Distinction

One of Daniels' requirements for a proper theory of just health care is that it must distinguish between more important and less important health care services (2001). Daniels meets this requirement by utilizing the treatment/enhancement distinction in both his early and later accounts of just health care.

Treatment is typically thought of as medical intervention meant to maintain, improve, or restore health or prevent conditions not conducive to health, with health considered to be species-typical functioning.

Enhancement is typically thought to be medical intervention used to improve health beyond species-typical functioning (Daniels, 2000). A notable difference between Daniels' earlier and later accounts of just health care is that in the later accounts, Daniels presents a much less stringent account of

the treatment/enhancement distinction and its role in addressing the distribution of medical interventions.

In earlier accounts of just health care, Daniels prioritizes treatment before enhancement because treating medical conditions that cause an individual to deviate from species-typical functioning is not conducive to equal opportunities (1985). In the instance of enhancement, however, typically individuals have already achieved species-typical functioning and already have access to a normal range of opportunities. In more recent accounts of just health care, however, Daniels (2000, 2001) admits that the treatment/enhancement distinction understood as species-typical functioning matches at best incompletely with achievement of the normal opportunity range. If the focus is opportunity, health care personnel may not provide some treatment practices and it may provide some enhancement practices. This part of Daniels' account of the treatment/enhancement distinction aligns with his claim that sometimes we are obligated to use health care services to change how skills and talents are distributed. Considering medical intervention to be treatment is not a sufficient condition for that intervention to be provided by health care personnel since the needs of individuals surpass medicine's resources. Disease may be the primary reason to treat individuals; however, there are reasons to offer nontherapeutic or enhancement services including for purposes such as ensuring opportunities. Daniels gives the example of nontherapeutic abortion. This intervention is not provided on the

basis that it will improve individual functioning, but it may be necessary, to safeguard women's rights. Thus, Daniels concludes that in the name of just health care, health care institutions may provide abortions, a nontherapeutic intervention, to women (Daniels 2000, 2001).

According to Daniels' (Buchanan et. al, 2000; Daniels 1985, 2000) account of just health care, the treatment/enhancement distinction can only play a limited role in health care decisions. If treating some diseases can take priority over some enhancements, according to Daniel's account of just health care, yet there are some instances when health care personnel are obligated to provide enhancement practices and not treatment practices, then this implies that there are some instances when individuals seeking enhancement should have the same consideration as individuals seeking treatment.

Drawing further conclusions from Daniels' (1985, 2000) account of just health care, maintaining species-typical functioning for the sake of maintaining equality of opportunity, health care personnel may be required to offer some medical intervention that may be considered enhancement. For instance, health care personnel may be required to provide growth hormone therapy for short-statured children who have a normal functioning endocrine system and whose short stature is not the result of disease if short stature affects their range of opportunities (see Chapter 3). Next, I examine an alternative to Daniels' account of just health care—prioritarianism.

Prioritarianism

The view that I focus on in this dissertation is the view endorsed by Richard Arneson (2000) called “responsibility-catering prioritarianism” (prioritarianism). Prioritarianism, as a matter of justice, distributes resources by prioritizing the wellbeing of individuals that are the least well off over individuals that are better off. Wellbeing can be defined in terms of general wellbeing, economic wellbeing and/or access to resources (Arneson 2010).

Prioritarianism has been criticized for being a leveling down principle that sets the unattainable goal of strict equality. Putting an analysis of the criticisms aside, it will suffice for my purposes here to say that in response to the criticisms like the leveling down criticism, prioritarians have adopted an equality of opportunity account of justice; the goal is not equality of outcomes but rather that individuals have an equal opportunity to obtain desirable resources or that we have fair shares of total resources (Anderson, 1999). Next, I apply prioritarians’ response to leveling down objections within the context of justly distributing medical resources.

Richard Arneson (2000, 2010) is an example of a prioritarian who prioritizes the worst off when distributing resources; however, prioritizing the worst off requires us to identify who is the worst off. One of the many ways to determine the worst off and subsequently who ought to have access to resources is to determine who has a disease and who does not. For

instance, mitigating the effects of disease is a concern for prioritarians when disease depletes wellbeing (Arneson, 2010). If having a disease makes someone more worse off than someone who does not have a disease, then it would follow that according to a prioritarian that utilizes the typical view of the treatment/enhancement distinction, priority is given to individuals who use health care's resources to mitigate the effects of disease, or for treatment purposes. Individuals who use health care's resources to mitigate the effects of unwanted conditions that are not diseases, say rhinoplasty for an undiseased distorted nose, are prioritized after individuals seeking treatment.

If prioritarians needed another way to determine the worst off, they could take a queue from luck egalitarians and concede that there is a distinction between instances when we are culpable for the disadvantages spurred by disease, option luck, and instances when we are not culpable for the disadvantages spurred by disease, brute luck. A prioritarian advocating this argument, such as Arneson (2010), may state that individuals who are not culpable for their disease and thus their disadvantages are more worst off than individuals who are culpable for their disease and thus their disadvantages, giving the former priority to medical resources. This would be like saying that individuals disadvantaged by congenital disorders are prioritized before individuals disadvantaged by their choice to partake in intravenous drug use or choosing to smoke cigarettes (assuming that these

are our decisions to make).

One way to determine the requirements of justice within a prioritarian account of distributive justice is to utilize the treatment/enhancement distinction. However, Shlomi Segall (2010) gives an example of a prioritarian account of distributive justice in health care that does not rely on the treatment/enhancement distinction. On his view, medical intervention is considered to be just when conditions are unwanted, reasonably unavoidable, and disadvantageous, and are the result of social or natural circumstances. Although Segall prioritizes the least well off, in Segall's prioritarian account, the least well off are not necessarily always the individuals who use medical resources for intervention purposes as an unwanted condition that is not a disease can be considered a disadvantage.

According to Segall (2010), just health care requires us to treat pathologies and deviations from normal species functioning; however, some health deficits are not matters of pathologies and are not deviations from normal species functioning, yet a system of just health care ought to treat these conditions, even if they are considered enhancements. This account of just health care requires the moral irrelevance of the treatment/enhancement distinction for the sake of ensuring equality.

Under Segall's (2010) account of just health care, individuals seeking treatment do not necessarily always take priority over individuals seeking enhancement, by virtue of using medical resources for treatment. Rather,

prioritarianism focuses on how disadvantageous conditions and the effects of those conditions make individuals the worst off. For example, to demonstrate the differences between Segall's (2010) prioritarian account of justice and Daniels' functionalist account of justice, Segall (2010) employs the commonly used example of significantly short-statured children. One child is extremely short because she has short parents while another child is extremely short because of a growth hormone deficiency. If there are disadvantages associated with being extremely short then relying on Segall's account of justice, we ought to treat short children with a disease that causes their short stature and children that do not have a disease but are equally short in the same manner, all other things being equal (Segall, 2010).

This example demonstrates a corollary claim in Segall's prioritarian account, which is that a lack of disease is not always an understood, unacceptable use of medical interventions. In the instance that individuals are considered the worst off, determined by their poor health, whether they are seeking treatment or enhancement is irrelevant to the acceptability of intervention.

Placing the example of the short-statured children within Daniels' functionalist account of just health care, the growth hormone deficient child is prioritized before the short child who is not growth hormone deficient because the former has a disease and the latter does not. Daniels' account of just health care also calls for us to examine whether the condition prohibits

individuals' ability to have a normal range of opportunities (Daniels, 1985). So if it were determined that being significantly shorter than the rest of the population hinders her normal range of opportunities in ways such as limiting career prospects or her limited ability to function in a society that does not cater to the extremely short, then the child that is not growth hormone deficient would be entitled to growth hormone treatment. If extreme short stature, however, does not hinder normal range of opportunities, then neither a short child nor a growth hormone deficient child would be entitled to treatment on Daniels' view (2001). As Daniels' (2001) states, issues of distributive justice are judged against the backdrop of the society that individuals live in. This means that we have to take into account individuals' ability to experience a normal range of opportunities, like that of the extremely short, given the society that they live in.

Next, I examine criticisms of arguments that distinguish between treatment and enhancement for whatever purpose, whether it is to ensure opportunities or to prioritize the least well off. The following criticisms are raised by Daniels' himself and are meant to contribute to the philosophical analysis of the treatment/enhancement distinction in this dissertation as a whole.

Criticisms of the Treatment/Enhancement Distinction

Daniels' earlier accounts of just health care allow room for the treatment/enhancement distinction to have a bigger role in how medical resources are allocated, namely that the treatment/enhancement distinction, in more instances than not, matches obligatory and nonobligatory intervention by health care institutions (1985). Daniels' later accounts of just health care allow room for the treatment/enhancement distinction to have less of a role in allocation of medical resources (Daniels, 2000).

Daniels raises two objections to the treatment/enhancement distinction that are inspired by cases where it is difficult to distinguish between treatment and enhancement. The first objection is that the treatment/enhancement distinction does not possess the moral significance that is often associated with its use. Concerning insurance practices, sometimes we are compelled to insure ailments that are not diseases just as we are compelled to fund diseases. Subsequently, the treatment/enhancement distinction does not always match up perfectly with our moral obligations.

The second objection to the treatment/enhancement distinction that Daniels (2000) raises is that it is our values that limit the kinds of conditions that are considered to be diseases. Furthermore when we inconsistently apply these value judgments when distributing resources, distinctions between treatment and enhancement seem arbitrary. The treatment/enhancement distinction is then not a biological distinction but a

distinction between values. Therefore, the treatment/enhancement distinction cannot be used to draw moral boundaries because we created the values that the treatment/enhancement distinction relies upon.

The central concern behind both objections is the moral significance that is associated with the treatment/enhancement distinction and the moral implications that are drawn from it. To respond to these objections, we have to accept that the treatment/enhancement distinction is 1) a normative distinction with imperfect application to some cases; 2) it relies on values that are often times socially and not always biologically created; and 3) that these values, represented as explanations of disease, health, human functioning, and normality, are an inescapable consequence of distributing limited resources whose supply does not meet the demand for those resources. Lastly, when individuals experience the same problematic effects of disease, the treatment/enhancement distinction should matter less when determining who is entitled to medical intervention.

I suspect that this response to the two objections raised by Daniels” (2000) may be difficult to accept because it relies on the idea that the second objection is not so much as an objection but a reality of any theory of distributive justice in health care, not just a reality of the treatment/enhancement distinction. My response also relies on the idea that the concepts that the treatment/enhancement distinction relies on are ultimately normative. These ideas, which are the foundation of my response

in this chapter and the foundation of this entire dissertation have to be accepted if the treatment/enhancement distinction is an option for an appropriate theory of distributive justice in health care. In the next section I give an example that illustrates my analysis of the treatment/enhancement distinction.

Part 2: Case Study: Surgical Leg Amputation

In this section, I present two accounts of an example of a health care dilemma. Together, these accounts help to demonstrate that the treatment/enhancement distinction is not an independent concept. They also demonstrate that the treatment/enhancement distinction cannot be used to draw conclusions about medical intervention without relying on other concepts, such as disease and normality.

First is the case of Jane, a young, professional sprinter. Jane is involved in a very bad car accident that damages both of her legs. To save her life, physicians recommend that she consent to amputating both of her legs. Physicians inform Jane that because her legs will be amputated below the knee she will be a candidate for prosthetic legs. Taking this into account, Jane consents to surgery. After her surgery and some recovery time, Jane is fitted with prosthetics. As an athlete for most of her life, Jane looks for a sport that she can compete in given her recent leg amputations. She discovers a love for distance running and begins to compete in multiple marathons.

Although Jane cannot participate in some of the sports that she enjoyed before her leg amputation anymore, she enjoys the ability to competitively run that her prosthetic legs give her.

In the previous example, Jane transitions from normal human functioning (e.g., possessing both legs) to abnormal human functioning (requiring surgery to remove her legs), and then back to gaining some sense of normal capabilities, e.g., being able to walk again by the artificial means of prosthetics. Contextually speaking, the practice of leg amputation is a therapeutic intervention rather than enhancement because amputating Jane's legs is for the purpose of restoring health and not for the sole purpose of being a better running competitor.

When determining whether Jane's medical intervention is an example of treatment or enhancement, we have to turn to the concept of normality to draw conclusions. Comparing the normality of her functioning before medical intervention to the abnormality of her functioning, yet normal capabilities, after medical intervention allows us to draw conclusions about the acceptability of intervention. For example, before the car accident, Jane experienced normal functioning; however, the car accident eliminated this functioning. Medical intervention was required to give her some resemblance of normal functioning. If we can determine that the car accident was of no fault of her own and that not having the ability to walk resulted in less access to a normal range of opportunities, then allowing Jane to have prosthetic legs

would be acceptable under both prioritarian and opportunity accounts of just health care.

Consider a second scenario in which Jane is a professional sprinter but has never been in a car accident. She has always had an average sprinting career but longed to break track records and elevate her career. After reading an article about the capabilities of technologically advanced leg prosthetics, Jane decides to have her legs amputated so that she can get prosthetics legs and use the technology to advance her career.

In this example, Jane's legs are not functioning abnormally, nor is any other part of her body, and assumingly her mind, diseased in any relevant way. Amputating Jane's legs is not to ameliorate the results of a traumatic injury or to correct functioning that is below normal functioning; rather leg amputation is spurred by Jane's desire to function beyond normal functioning and her desire for a better career. Relying on the concept of normality, in this scenario medical intervention is likely to be considered enhancement because Jane does not have a disease, she is functioning at a species-typical level, and amputating her legs is not the result of a significant disadvantageous condition.

One conclusion to draw from examining both scenarios is that the treatment/enhancement distinction cannot stand on its own. In scenarios such as ones similar to the case of amputating Jane's legs, we have to utilize accounts of proper human functioning, normality, and disease. This is the

case when determining Jane's level of functioning before and after medical intervention and when determining the reasons for medical intervention. For example, in the first scenario, based on functionalist accounts of normality, amputating Jane's legs and fitting her for prostheses would be considered therapeutic intervention to restore a physical capability—walking—that she lost as the result of injury.

Together these two examples support the overall goal of this chapter, and dissertation—without concepts like normality and disease, the treatment/enhancement distinction would be useless to accounts of just health care. This includes concerns about who gets to use medical resources, for what purposes, and who ought to pay for the use of medical resource.

Conclusion

In this chapter, I presented some of the most common explanations of normality, health, disease, and human functioning. I then presented some frequently utilized accounts of just health care that rely on these concepts, including the treatment/enhancement distinction. Together, the explanations of these concepts and accounts of just health care show that the theoretical and practical approaches for determining how health care should be distributed are complex and consist of a series of intricate and interrelated supporting claims. Ultimately, decisions about justice in health care are normative and are contingent on normative accounts of the role of health care

institutions and their role in treating diseases and maintaining health.

Concerning the use of the treatment/enhancement distinction, the focus of this chapter, we can address concerns about using health care's resources for enhancement practices by acknowledging the limitations of the treatment/enhancement distinction and using it as more of a guide to distributive justice, rather than a stringent method of practicing medicine.

CHAPTER 3

JUSTLY DISTRIBUTING RESOURCES: A GROWTH HORMONE THERAPY CASE STUDY

This chapter uses the common dilemma of determining how to justly distribute growth hormone (GH) therapy as a model for how the treatment/enhancement distinction is used in judgments about distribution of resources. Specifically, this chapter explores arguments that utilize the concepts treatment and enhancement to draw ethical distinctions between the use of GH therapy for individuals of short stature diagnosed with growth hormone deficiency (GHD) and children who do not have GHD, but are of height regarded as equally problematic. I focus on children with GHD and children with Idiopathic Short Stature (ISS), or children whose severe short stature is not the result of GHD, but of an unknown cause.

Norman Daniels (1985) offers a distributive justice dilemma with the frequently cited example of two children of equally severe short stature— one child's short stature is the result of GHD while the other child's short stature

is the result of an unknown cause or is the biological result of having short parents. The example is often used to illustrate the basic moral quandary in bioethics: “What are (if any) health care institutions’ obligations to the sick and to the well?” The treatment/enhancement distinction is an attempt to address this moral quandary. The treatment/enhancement distinction is commonly used to argue that health care personnel are only obligated to intervene on the behalf of the unwell, making the intervention a therapeutic intervention, rather than an enhancement practice. This argument, however, leaves out the possibility that individuals who do not meet standards of normal functioning may also suffer the effects of severe short stature and can benefit from medical intervention. In this chapter, I will use this basic dilemma in bioethics, and the use of the treatment/enhancement distinction as a response to this dilemma to address health care institutions’ obligation to children with and without GHD. I will also discuss how risks of intervention play a factor when using the treatment/enhancement distinction to respond to dilemmas.

I contend that when we are presented with issues of distributive justice, the ethical work in these arguments is done by normative explanations of common concepts in bioethics. Arguments cannot utilize the treatment/enhancement distinction without also utilizing normative explanations of the role of health care, disease, health, and proper human functioning. These judgments then play an essential role in determining

when intervention is considered treatment or enhancement and when intervention is permissible.

The treatment/enhancement distinction does not always perfectly distinguish between permissibility and impermissibility of medical intervention. As I contend in this chapter, the treatment/enhancement distinction only has limited significance for arguments concerning distributive justice. This means that considering some uses of GH therapy enhancement does not necessarily mean that they are impermissible. Therefore, when individuals who are considered to be biologically functioning normally experience the same undesirable and disadvantageous effects of a condition shared by an individual who is not biologically functioning normally, the treatment/enhancement distinction becomes a less than appropriate decision-making tool and focus should be transferred to the effects of the condition.

Arguments that disregard the similar height between short-statured, GHD individuals and individuals with ISS and instead focus on whether the individuals have a disease to determine permissibility of medical intervention are typically referred to as diagnosis-based arguments. Diagnosis-based arguments also typically state that non-GHD individuals should not undergo GH therapy because they do not have a disease, making their use of medical intervention enhancement, rather than treatment.

A corollary of diagnosis-based arguments is that individuals who are thought to be seeking treatment have priority in the distribution of GH therapy over individuals thought to be seeking enhancement. A conclusion that may be thought to follow from this line of thinking is that individuals who seek treatment are allowed first priority at utilizing medical resources because their needs are in response to what is considered to be a legitimate medical ailment. In contrast, individuals who seek enhancement are prioritized after individuals seeking treatment because their needs are considered to be non-medically imperative. However, this chapter argues that the presence of disease does not always lead to the assumption that the individual must be treated and the absence of disease does not always lead to the assumption that the individual must not be treated.

Although the GHD/ISS example concerns treatment and enhancement, how we respond to the example has bigger implications for how health care institutions maintain justice for individuals seeking enhancement, namely individuals with troubling bodily characteristics, but lack a diagnosable disability or disease. Using “disease” as a basis for distributive justice is an acceptable way to ground arguments for health care’s obligation to treat but its use can also unjustly ignore the needs of those seeking enhancement but suffer from a disability. This means that in some instances, maintaining justice for those seeking enhancement is just as important as maintaining justice for those seeking treatment. My goal here is to demonstrate such an

example and how the example can be a guide for how health care can ensure justice for those seeking enhancement.

In Part 1 of this chapter, I give the relevant background information about GH and GH therapy. In Part 2, I give examples of diagnosis-based arguments that seemingly rely on the treatment/enhancement distinction to recommend GH therapy only for children with GHD. I then show how “disease” as dysfunction and medicine’s goal of remedying dysfunction are the motivating concepts in these arguments, not the “treatment/enhancement distinction.” I conclude by showing how examples comparing GHD and ISS represent an unclear case for justice in health care if justice is viewed as medicine’s obligation to treat the diseased or disabled and an indirect contribution to maintaining fair equality of opportunity.

Availability of Growth Hormone

The change in supply of HGH¹ from limited amounts of HGH to virtually unlimited supplies of synthetic GH identified and modified the relevant ethical questions concerning GH therapy. This includes what uses of GH therapy are considered treatment and what uses are thought to be enhancement. The way we answer these questions has implications for medical insurance companies and for the ways in which health care affects equality.

GH therapy was first made available after 1956 when it was reported that HGH could be extracted from the pituitary glands of cadavers (Canadian Medical Association, 1967). When the only method of administering GH therapy was to first obtain very small amounts of HGH by extracting it from designated donated cadavers (Allen & Fost, 2003; Carel, 2002; Tanner, 1967; Verweij & Kortmann, 1997), the stringent method itself encouraged strict HGH therapy standards and limited ethical concerns about who should be able to use HGH therapy. The limited supply of HGH supported the belief that only a select group of individuals who were thought to need GH to treat predetermined medical conditions ought to receive therapy because there was not enough to distribute to everyone who might want, need, or benefit from GH therapy (Guyda, 1999; Lee, 2006; Verweij & Kortmann, 1997).

Individuals who were determined to have a genuine need for HGH therapy were primarily children whose short stature was the result of a disease such as GHD or chronic renal failure and Turner's syndrome, which are non-GHD diseases (Verweij & Kortmann, 1997).³ The claims were that these individuals had a disease, defined as bodily dysfunction (Boorse, 1975, 1976) or deviation from species-typical normal functioning (Daniels, 1985). The presence of disease gave them a legitimate claim to scarce medical resources, meaning that their use of HGH therapy is considered to be treatment.

These claims created the grounds for diagnosis-based arguments, which exclude most non-GHD individuals from GH therapy. Even though some studies suggest that individuals without GHD or other select diseases could have the same favorable outcomes of therapy as GHD individuals (Tanner, 1967), it was once a common practice to rely on diagnosis-based arguments to support reserving the limited supplies of HGH for those with a disease. This is still a persistent belief in GH discourse, even though there are more recent studies that suggest that non-GHD individuals can also experience an increase in adult height as a result of GH therapy (Dahlgren, 2011; Finkelstein, 2002; Leschek, 2004).

As supplies of synthetic GH increased the availability of GH, the thought was that more individuals could be allowed to utilize GH therapy because the argument that limited supplies of GH ought to limit access to GH therapy no longer held. Subsequently, the appropriateness of strict standards for GH distribution based on diagnosis was called into question (Lee, 2006).

Now that minimal amounts of HGH were no longer able to support limiting HGH therapy to particular individuals, other arguments had to be put forth to restrict the use of GH for specified therapeutic uses. As the arguments in GH discourse evolved, individuals with ISS or individuals who are just shorter than they or their parents want them to be became more central to arguments concerning GH therapy. Furthermore, arguments also had to evolve and provide other explanations for restricting GH therapy.

GHD, ISS, and the Short Statured

Children with ISS are extremely short individuals, whose height is below average for their age and sex, within two standard deviations from the mean in their relative predicted adult height bracket. For boys, the bracket is less than 64 inches and for girls, it is less than 60 inches (Hirsch et al., 2003). Yet individuals with ISS do not have any adverse health conditions that can be considered to be the cause of their short stature (Lee, 2006). Through testing, ISS children also are shown to have normal levels of growth hormone.²

Lee (2006) suggests that ISS children may have an underlying biological cause of their short stature that is not necessarily a disease. For instance, he suggests that among individuals with ISS, there are varying degrees of serum concentrations of IGF (insulin-like growth factor), varying stages of bone-age delay, and variations in the onset of puberty. Based on these variations in biological factors, Lee (2006) concludes that there are biological impairments that result in a lack of growth.

Chernausek (2011) agrees that in most cases of ISS, there is an abnormal GH-insulin-like GH (GH-IGF) axis and suggests using this to predict response to GH therapy. If Lee (2006) and Chernausek (2011) are correct, then adverse biological mechanisms would be one difference between healthy, short children and ISS children. This would also make ISS children more similar to GHD children. Instead of using diagnosis to determine who is

allowed to receive GH therapy, Lee (2006) suggests using molecular defects in growth-related genes to determine acceptability of GH therapy. Lee claims that determining who should be allowed to receive therapy is an issue of whether short stature is a disease or a spectrum of development. Making this determination will determine if GH therapy for ISS is a therapeutic intervention for a biological abnormality or an enhancement intervention for short stature not caused by a disease.

It would seem that ISS individuals have many factors in their favor that would end questioning the acceptability of allowing them to have GH therapy, including FDA approval of GH therapy for individuals with ISS, clinical trials that support the potential benefits of GH therapy, and the wide availability of GH.⁴ Since physicians are the gatekeepers of GH therapy, however, and many are still hesitant to suggest GH therapy for their ISS individuals, the acceptability of allowing them to receive GH therapy is still questioned, making their place in GH discourse one of uncertainty.

Among physicians and bioethicists, there is lack of agreement about the requirements that individuals must satisfy to use GH therapy. Based on utilitarian arguments and prioritarian arguments, all individuals of a certain extreme short stature should be allowed to have GH therapy regardless of their diagnosis or lack of diagnosis because some heights are considered disadvantageous and disabling. Others argue that ISS individuals are

considered healthy and that GH therapy should be reserved for unhealthy individuals.

Determining how individuals with ISS fit into GH discourse is more ethically challenging when we consider that many ISS children have the same extreme short stature and the same projected adult height as many GHD children. This is problematic because the acceptability of giving GH therapy to individuals with GHD has rarely been questioned, while individuals with ISS are commonly excluded from GH therapy.

Children with ISS can be in the same height percentile (1st percentile) as healthy short, children. Since healthy, short children do not have a disease that causes their short stature, healthy, short children and children with ISS are usually grouped together as “non-GHD” individuals. This is the case with some clinical trials, studies, and articles concerning the ethics of GH therapy. On occasion, articles also use the term “healthy, short individuals” to refer to both individuals with ISS and healthy, short individuals who have not been diagnosed with ISS. In some cases, the interchangeability of these terms is appropriate because there can be very little difference between some healthy short individuals, and some individuals with ISS.

The similarities between some individuals with ISS and some healthy, short children encourage ethical questions such as ‘Are there any ethically relevant differences between individuals with ISS and healthy, short children?’ and ‘If there are ethically relevant differences between individuals

with ISS and healthy, short children, do the differences warrant different treatment in health care?' There are some similarities between some individuals with ISS and some healthy, short individuals, such as being in the 1st percentile of height and the lack of an identifiable disease that causes their short stature; however, there are some differences amongst some healthy, short individuals and some ISS individuals. The biggest difference between these two groups of individuals is the possible biological causes of stunted height in individuals with ISS, while healthy, short children are not thought to have any biological dysfunction. This difference, however, may not be significant enough to withhold GH therapy from normal, short children if one believes that individuals with ISS ought to be allowed GH therapy, whether they have a biological dysfunction or no biological dysfunction.

Some healthy, short children are of short stature because of a constitutional growth delay. This means that their growth in height has not yet occurred; however, it will occur in the future and their height will eventually catch up to the appropriate height for their age and sex. Some healthy, short children are significantly taller than ISS children and are considered to be of an appropriate height given their age and sex; however, their parents are under the assumption that they are too short in general, or that they are too short to achieve a particular goal so they seek GH therapy. These goals can include becoming a professional athlete or attaining a high-paying job in the future (Benjamin et al., 1984).

Some arguments conclude that because there is some evidence that shorter individuals receive lower salaries than their taller counterparts and some empirical evidence that individuals of short stature, regardless of the cause of their short stature, experience some decreased level of wellbeing (Clemmons, 2010), healthy, short individuals, including normal short children, should be allocated GH therapy. Noeker (2011) claims that there is some reason to believe that ISS individuals (without biological dysfunction) have a lower quality of life. In agreement, Chaplin and others (2011) state that individuals with ISS and individuals with GHD can experience psychological distress as a result of their short stature, which can be remedied by GH therapy. They report that a questionnaire answered by the parents of ISS and GHD children from ages 3 to 11 showed psychological improvement over a 2-year period (most in as little as 3 months) of GH therapy. The psychological improvement most demonstrated in ISS individuals was an increase in self-esteem (Chaplin et al., 2011). Noeker and Chaplin's arguments, however, are not the dominant view.

Most arguments that are a part of GH discourse do not give much credit to the empirical evidence that individuals of short stature have a decreased level of wellbeing (Guyda, 1999). These arguments conclude that there is not any direct correlation between wellbeing and height, and that even if there were, there are other ways to increase wellbeing besides augmenting height using GH therapy. Arguments that follow this structure

conclude that non-GHD children should not be allowed GH therapy. When drawing this conclusion about non-GHD children, we also have to consider that there also is not any direct evidence that GH therapy improves GH individuals' wellbeing (as cited in, Durand-Zaleski, 2011; Lee, 2006).

Arguments against giving non-GHD children GH therapy also state that it is more difficult to manage parents' interests in making non-GHD children taller by utilizing GH therapy than the parents of GHD children. These arguments do not deny that this problem exists in many instances of allocating GH therapy to GHD children, but claim that this problem is especially hard to identify, manage, and counter if necessary, when children are just shorter than what their parents desire (Benjamin et al., 1984).

Both of these arguments represent a general concern associated with GH therapy. The concern is that since there is not any direct evidence that short stature correlates with decreased wellbeing and that it can be difficult to manage the expectations of parents with short, non-GHD children, the risks associated with using GH therapy to treat nonpathological, short children is too great a risk to take. The risks associated with medical intervention are especially relevant when children are the potential patients. Children are a vulnerable population that can be manipulated and taken advantage of if the interests of outside parties are not properly managed. This is especially important since children do not consent to medical intervention; rather, their parents give consent for them. In some instances,

intervention and the accompanying risks, however, may be worthwhile. The treatment/enhancement distinction may be used to distinguish between risks that are worthwhile and risks that are not worthwhile; however, to do this, arguments that use the treatment/enhancement distinction must also rely on other relevant concepts. But the treatment/enhancement distinction may not always match perfectly with the distinction between acceptable and unacceptable risks if it can be determined that both GHD and non-GHD experience some of the same downsides of short stature.

To sort all the changes that the availability of GH has caused amongst the relevant individuals in GH therapy and to determine acceptability, many GH standards have been proposed. Some argue for the original standards, that GH therapy should only be allowed for individuals with GHD or some other short-stature-causing disease (Growth Hormone Research Society, 2000; Lantos & Siegler, 1989). Others argue that diagnoses should not determine acceptability of GH therapy, or that diagnoses should be taken into consideration as only one factor among many others when determining acceptability of GH therapy (Lee, 2006; Pfeifer, 2011). Although old standards may not match the current supply of GH, it has been argued that it would be immoral to give GH therapy to anyone who wanted to be taller without some restrictions (Allen & Fost, 2003). The next section explores questions whose answers hinge on what standards are deemed appropriate for GH therapy.

Equality

When drawing conclusions that do not allow a group of individuals to take part in any therapeutic practices, a likely accompanying concern is whether those conclusions contribute to inequality. When drawing conclusions about who is entitled to GH therapy, those drawing the conclusions must also consider whether their GH therapy standards contribute to inequality among individuals of short stature. When different conclusions are drawn about similar medical conditions, we have to question the legitimacy of the criteria used to draw those conclusions. Arguments that focus on diagnosis have to question if the presence of disease or the lack thereof is a legitimate criterion for GH therapy distribution or whether it is a morally arbitrary criterion. Whether treating GHD and non-GHD individuals as equals is the proper response to the dilemma of how to fairly distribute GH therapy depends on the amount of emphasis we place on diagnosis.

Another aspect of the relationship between GH therapy and equality is examining how expanding the range of individuals who ought to be allowed GH therapy, to include non-GHD individuals will affect equality among the general population. First, if the requirements for GH therapy are relaxed, making it more widely available, the rich are more likely to have the resources to obtain therapy, making them more likely to reap the benefits of therapy. Conversely, many poor people will not have the opportunity to receive GH therapy because they lack certain resources, namely financial

resources. In a sense, this will make the rich, richer. If it is indeed true that taller people are more likely to receive high-paying jobs, then making the already rich, taller will increase the likelihood that they will have higher salaries than their comparatively shorter counterparts who will earn less. Second, expanding the type of individuals who are allowed GH therapy may raise the highest percentile of height, increasing the gap between people in the highest percentile (the tall) and people in the last percentile (the short) (Tauer, 1995). Increasing the amount of people who are allowed GH therapy will change the standards for who is considered tall and who is considered short.

Allen and Fost (1990) note that there is another option for examining the relationship between GH therapy and equality. GH therapy can be viewed as a privilege that is allowed to those who can pay for it but not a right or something owed to those who cannot afford it. Proponents of this option state that society is not obligated to provide some opportunities to all individuals. Society is only obligated to provide people with basic needs like food, education, and perhaps basic health care (Allen and Fost, 1990). In this instance, GH therapy is more or less seen as an enhancement that certain individuals are not entitled to, unlike therapeutic practices.

The aim of this section is not to advocate for a particular set of requirements that individuals must satisfy to receive GH therapy or to argue that medical insurance companies should bear the financial costs of GH

therapy or that GH therapy contributes to inequality. This section provides context for the arguments that are to follow and what is at stake for the individuals whom these arguments affect. The following section discusses examples of diagnosis-based arguments, which advocate standards of GH therapy distribution that are based on separating “treatment” practices from “enhancement” practices.

Diagnosis-Based Arguments

Typically, diagnosis-based arguments reference some point at which GH therapy is no longer a therapeutic practice, but an enhancement practice. In diagnosis-based arguments, this line is based on the presence of disease. Typically, diagnosis-based arguments model the following form: Individuals whose short stature is caused by one of the diseases on a specified list, including GHD, should be allowed to have GH therapy. When GH therapy is used to ameliorate the short stature of these individuals, therapy is considered to be treatment and thus permissible. Conversely, individuals whose short stature is not caused by a disease, but rather factors like genetics or when the cause is unknown, should not be allowed to have GH therapy. When GH therapy is used to ameliorate the short stature of these individuals therapy is considered to be enhancement and thus impermissible.

Another version of diagnosis-based arguments begins with the claim that if the goal of medicine is to treat diseases, then medical practices should

be used to treat only diseases or at least prioritize treatment of disease. This version of diagnosis-based arguments relies on debatable judgments about the goals of medicine and the nature of disease to reach its conclusion.

In this section, I discuss three diagnosis-based arguments that are commonly cited in GH discourse⁵ whose structure is similar to the aforementioned argument model. Through this discussion, I will show how bioethicists who offer these arguments utilize a particular explanation of disease to withhold GH therapy from individuals with ISS even though their arguments are contrary to evidence that shows that individuals with ISS (or non-GHD, as I will refer to them) can benefit from GH therapy.

Diagnosis-Based Arguments and Clinical Trials

Tanner (1967) reports that both individuals with GHD and ISS can experience positive outcomes of HGH therapy. As reported by Tanner (1967), in a clinical trial, 10 of 16 children with ISS grew 0.52 times their expected height velocity before undergoing HGH therapy but grew 1.92 times their expected height velocity during the first year of therapy. Two children in the clinical trial with ISS had a poor or very little response to treatment, and 4 children with ISS developed antibodies, which can be an unforeseen consequence to therapy for some children, regardless of GHD or ISS. Although the outcomes of therapy for the children with ISS were not as great as the children with GHD, the children with ISS still experienced some

increase in height after undergoing HGH therapy. This study concluded that GHD children can benefit from HGH therapy, in terms of an increase in height, while non-GHD children can also benefit from GH therapy.

Tanner's (1967) conclusions were not the dominant view of the time, but the idea and the evidence that ISS individuals can benefit from GH therapy was a part of the literature. The assumption behind limiting GH therapy to GHD children was that these were the only individuals that could benefit from GH therapy; however, Tanner's (1967) study suggested that this assumption was false. Most diagnosis-based arguments that were made at the onset of GH therapy can only be criticized for not acknowledging that there was at least one trial that presented results that were contrary to their diagnosis-based arguments, whereas arguments that arose much later in the history of GH discourse face a different criticism. Once more trials were available that showed individuals with ISS had positive outcomes of GH therapy, diagnosis-based arguments that continued to conclude that individuals with ISS should not be allowed GH therapy face criticisms for making arguments contrary to the evidence.

A different argument for limiting GH therapy to children with GHD is that only these children—not ISS children—have a disease. However, many diagnosis-based arguments made at any point in GH discourse, such as an argument made by Mason (1972), face criticisms grounded in their use of disease.

Mason (1972) argues that GHD children use GH therapy for treatment purposes, while non-GHD children use GH therapy for enhancement purposes. He supports this argument with the claim that individuals whose GHD diagnosis has been proven by thorough testing are the only ones who can benefit from GH therapy (Mason 1972); however, if there is some reason to believe that diagnosis is not the sole determinant of responsiveness to GH therapy, then another option for the basis of Mason's argument is an explanation of disease. Although he does distinguish between uses of GH therapy that are for therapeutic purposes and uses of GH therapy that are for enhancement purposes, the treatment/enhancement distinction is not the basis of his argument. The treatment/enhancement distinction is not a candidate for the concept that Mason's ethical judgments are grounded upon because the distinction itself must be grounded in a concept. And in this case, that concept is disease.

Arguably, Mason's (1972) argument is an example of a diagnosis-based argument that relies on the explanation of disease as dysfunction to recommend GH therapy for the treatment of short stature for GHD children, but not for the enhancement of non-GHD children. He states that to determine the failure of growth, a patient must undergo a thyroid test to determine if the thyroid is functioning properly. If it is not functioning properly, it can cause the pituitary gland to not function properly, meaning it will not secrete enough HGH. If this is the diagnosis standard that Mason

utilizes for GH therapy, then individuals with GHD whose pituitary gland is dysfunctional are allowed treatment. Conversely, individuals that do not have a dysfunctional thyroid or pituitary gland are not allowed GH therapy, including ISS individuals. This would support his claims about treatment and enhancement uses of GH therapy better than the idea that GH therapy can only benefit individuals with GHD.

Another option for the basis of Mason's (1972) claims about treatment and enhancement is his claim that a child has to have a suitable internal environment and an aversion free external environment, one that will be receptive to GH therapy, to benefit from therapy. Mason states that GHD children have a suitable internal environment because of their gland dysfunction. However, even if Mason's diagnosis-based argument is grounded on individuals' suitable internal environment, he is still relying on what it means for humans to function properly as the basis of his claims about GH therapy standards.

If Mason's (1972) argument relies on a suitable internal environment, he must also consider that this is not the only criterion that determines success of GH therapy. Mason seems to acknowledge this when he states growth hormone is but one metabolic factor that influences growth in height. An adverse internal environment can prevent any child from being responsive to GH therapy, whether the individuals have GHD or ISS (National Institutes of Health, 1972, Root, 2011). If Mason grounds his

argument about treatment and enhancement on the claim that individuals must have a suitable internal environment for GH therapy to be effective, this standard should not solely apply to ISS children because his argument is true of non-GHD and GHD children.

Enhancement Research on non-GHD Children

Tauer (1994) criticizes the standards that were used by the National Institutes of Health (NIH) to approve clinical trials designed to determine the effectiveness of GH therapy on normal (“nondiseased”), short children (National Institutes of Health, 1990). She argues that by approving this study, the NIH permitted children to participate in clinical research for purposes other than health and medical treatment. Tauer’s argument is grounded in the claim that short stature is not characterized by improper body functioning; therefore, short stature is not a disease (Tauer, 1994). Additionally, Tauer (1995) makes the claim that uses of GH therapy for treatment purposes are acceptable while uses of GH therapy for enhancement purposes are unacceptable.

Rather than permit clinical trials for therapeutic purposes, Tauer (1994) argues that the standards used to permit the NIH trials lead the way for future research on children for purposes other than treatment. Tauer (1994) argues that the standards used to permit the clinical trials could be used to justify GH research for enhancement purposes, or intervention to

alter an undesirable condition because short stature is not a disease. Even though Tauer notes that the NIH trials claimed that enhancement applications of GH therapy were unintended, she believes the standards used to approve this study could justify greater-than-minimal risk research on children for purposes of enhancement, regardless of the NIH's intentions. This concern is grounded in children's inability to give informed consent to medical intervention. Nontherapeutic research is quite common; however, Tauer's argument goes beyond concerns about therapeutic vs. non-therapeutic research. Her concerns are focused on children as a vulnerable population and nontherapeutic research that uses this population for the sake of enhancement.

Tauer's (1994,1995) argument is an example of a diagnosis-based argument. She utilizes children's diagnoses of disease, or lack thereof to make claims about what research practices are considered enhancement, and thus unacceptable. Tauer, like Mason (1972) must give the basis of her conclusions about treatment and enhancement, thus about acceptable and unacceptable research. The treatment/enhancement distinction alone is an insufficient option for the basis of her conclusions because the treatment/enhancement distinction itself must be grounded in a concept. Accordingly, Tauer offers disease as the basis for her criticisms of NIH standards that approved enhancement practices.

Tauer (1994, 1995) utilizes an explanation of disease as improper function to make a diagnosis-based argument, which separates treatment practices from enhancement practices. Tauer (1994) explains enhancement as altering an undesirable condition. Tauer's explanation of enhancement, however, does not separate enhancement practices from treatment practices as treatment can also be explained as altering an undesirable trait, such as the very short stature associated with ISS. Yet according to Tauer, the presence of disease in one instance of GH therapy and the lack of disease in another instance of GH therapy separates treatment from enhancement, thus acceptable medical practices from unacceptable medical practices.

I further conclude that Tauer also uses disease to distinguish between acceptable risks and unacceptable risks of research practices. Although there are almost always some risks associated with most instances of biomedical research, those risks are acceptable for therapeutic purposes because there is the possibility of ameliorating disease; therefore, it is acceptable for parents to consent to research for therapeutic purposes. The risks of research, however, are unacceptable when disease is not present because the risks of intervention are not taken for the potential medical benefit; therefore, it is unacceptable for parents to consent to research for enhancement purposes.

Medicalizing Short Stature

As most ethicists that give diagnosis-based arguments, Verweij and Kortmann (1997) argue that even if children with ISS are responsive to GH therapy, responsiveness does not make GH therapy for ISS morally justifiable. GH therapy for ISS is only justifiable if the goal of therapy is to reduce the risks of psychological and social problems that may arise from short stature, not just to make children taller. This means that GH therapy would also have to include mental health therapy. When these conditions—desire to be taller and mental health therapy— are met, GH therapy is treatment. When the goal of GH therapy is just to make children taller, Verweij and Kortmann (1997) consider intervention to be enhancement. Although Allen and Fost (1990) do not agree with diagnosis-based arguments, such as Verweij and Kortmann's argument, and choose to focus on response to intervention rather than diagnosis, Allen and Fost do make a similar claim. Allen and Fost state that regardless of the cause of short stature, GH therapy may not always be the best response to short stature and more often counseling is best.

Verweij and Kortmann (1997) give a diagnosis-based argument to make the claim that when deciding whether a child with ISS should be given GH therapy, the answer is always 'no.' According to their argument, ISS is not a disease because it does not consist of subfunctioning parts nor does it compromise the health of the individual. If the general goal of medicine is to

prevent, eliminate, and/or reduce the suffering that accompanies disease, then treating ISS with GH therapy is not a goal of medicine.

Nonetheless, Verweij and Kortmann (1997) recognize that society may view short-statured people as abnormal but that the remedy to the social effects of short stature is not GH therapy but changing cultural stigmas; however, short-statured people may find it more beneficial to seek medical and psychological therapy than attempting to change societal views of the short. Because it can be a timely endeavor to change societal views of the short, parents of short children should not be seen as immoral people if they choose not to combat societal stigmas and seek GH therapy for their short child. It has been argued that as long as children's parents have been informed of the potential outcomes of therapy, including risks and benefits of therapy and the possibility that their children will not respond to therapy, it is the parents' right and responsibility to determine if their child with ISS should undergo GH therapy (Benjamin et al., 1984).

Verweij and Kortmann's (1997) argument is subject to criticism. First, their argument acknowledges the clinical trials that report that children with ISS can benefit from GH therapy, but does not believe the evidence justifies treatment. With this reasoning, Verweij and Kortmann apply a moral standard to ISS that they do not apply to GHD. Responsiveness cannot be a criteria used to allow the use of GH therapy by individuals with GHD if it is irrelevant to determining acceptability of GH therapy by non-GHD

individuals. If, however, there is empirical evidence that shows that ISS can be treated with GH therapy, then the presence of disease is just one of many possible criterion for allowing or denying therapy.

Furthermore, if Verweij and Kortmann (1997) utilize evidence as support for GH therapy for children with GHD, then the evidence should also be used to support GH therapy for children with ISS if it is available. Verweij and Kortmann argue that responsiveness should not justify treatment for ISS, yet rely on responsiveness to justify treatment for GHD. This is especially true if we believe in the reliability of the evidence that shows either similar responsiveness to GH therapy by GHD children and non-GHD children,⁶ that some GHD children do not respond to therapy (Coste et al., 1997), or that many other factors affect whether a child will respond to therapy, regardless of GHD or not (Mason, 1972; Root, 2011).

A second criticism of Verweij and Kortmann's (1997) argument is based on its view of medicine. They do not recommend allowing GH therapy for most non-GHD individuals based on their view of medicine and the goals of medicine. Although they adopt a general view of medicine's goals, which is to treat diseases, the actual practices of medicine differ greatly from this view. Medical practices include ameliorating ailments that are not diseases such as treating a deviated septum with rhinoplasty. One conclusion to draw is that either medical practices do not live up to the goals of medicine or Verweij and Kortmann's (1997) view of medicine's goal is just one of many

views, as considering a practice enhancement does not mean that it is not a part of medicine's goals.

Diagnosis-based arguments, demonstrated by the arguments offered by Tauer (1994, 1995), Mason (1972), and Verweij and Kortmann (1997), are examples of one type of argument in GH discourse that still persists. The basis of their arguments is that some practices are treatment, thus take priority over practices that are enhancement. To make their argument, I argue that they rely on the explanation of disease as dysfunction (see Chapter 2).

Mason (1972), Tauer (1994, 1994), and Verweij and Kortmann (1997) all give diagnosis-based arguments that exclude ISS individuals from GH therapy, but their arguments do not rely on the treatment/enhancement distinction; they rely on the presence of disease. As such, Tauer's argument cannot be criticized on the grounds that it relies on the distinction; however, it can be criticized for not acknowledging other accounts of disease and/or it can be criticized for deviating from the evidence.

Conclusion

In this chapter, I argue that arguments that separate uses of GH therapy that are considered to be treatment from uses of GH therapy that are considered to be enhancement, otherwise known as diagnosis-based arguments, do not outright rely on the treatment/enhancement distinction

because the distinction cannot function in arguments without first relying on another concept. In the case of diagnosis-based arguments, they rely on an explanation of disease as dysfunction to claim that when individuals with GHD and individuals with other specified diseases use GH therapy, it is a practice of treatment; however, when GH therapy is used by individuals with ISS, it is considered enhancement.

Diagnosis-based arguments can avoid some criticisms if they acknowledge that there may be reasons to deny GH therapy to some GHD individuals because labeling an ailment a disease is not the sole criterion in determining the acceptability of GH therapy. Furthermore, individuals who make diagnosis-based arguments have to acknowledge that it does not follow that considering an ailment a disease means that those with the disease should be treated. This approach acknowledges that there are other criteria that should be involved in determining the acceptability of GH therapy, such as the height of children's parents, safety, likelihood of response to treatment, costs, the psychological effects of therapy, and the psychological effects of not allowing the patient to receive therapy. This approach also allows diagnosis-based arguments to place some importance on whether individuals who desire GH therapy have been diagnosed with GHD or with another disease that causes short stature.

Acknowledging that it may be acceptable to allow some individuals with ISS to have GH therapy and unacceptable to not question whether all

GHD individuals ought to be allowed GH therapy, arguably, follows one notion of justice in which individuals in similar situations are treated in similar ways (Beauchamp & Childress, 2001), by utilizing the same standards for both types of individuals.

Carl Elliot (2005) shows how almost any practice that may *prima facie* appear to be enhancement can be explained in such a way that makes the practice treatment and vice versa. Giving equal consideration to individuals with ISS and GHD also acknowledges that both are seeking some form of enhancement. It also acknowledges that the parents of children with ISS are not all bad people, unwilling to accept the height that their genes and their ancestors' genes have determined for to their children or that the parents of ISS children suffer from excessive greed (Wasserman, 2004).

Regardless of the approach that is taken to determine the acceptability of GH therapy, bioethicists, pathologists, pediatricians, and endocrinologists have to remember that children are the ones that have to bear the risks of therapy (Benjamin et al., 1984) and the negative outcomes of being denied therapy. Therefore, determining whether certain criteria for GH therapy is justified in denying ISS children GH therapy should be reevaluated, taking into account the clinical trials that report similar outcomes of GH therapy for GHD and ISS children. We can argue that society should change its negative views about short stature and pay equal salaries to the short and the tall, but while society is making the transition to viewing the short-statured in a more

positive way, children are the ones who have to remain short and handle the social stigma attached to being short.

Endnotes

1. Human growth hormone (HGH) is a protein consisting of 191 amino acids that is stored and secreted by the pituitary gland. When the pituitary gland does not secrete enough HGH or when a patient has another specified disease, the result is typically short stature. Other factors such as genetic, social, psychological, nutritional, or poor health can also determine height.
2. As of 2011, these diseases are approved for GH therapy by the U.S. Food and Drug Administration. Other approved diseases include Prader-Willi syndrome, small for gestational age, and Noonan's syndrome (Verweij & Kortmann, 1997).
3. There is some controversy about the reliability of HGH testing. Many ISS and GHD patients are shown to have normal levels of HGH. Because of this, scholars like Saenger (2002) have called for better testing methods and Gelato and others (1986) have claimed that some testing methods such as measuring the amount of HGH released are not reliable methods to distinguish ISS from GHD.
4. In part, this idea was adapted from Hardin (2008).
5. This was determined by a literature search of GH therapy discourse.
6. Coste and others (1997) and Saenger (2002) argue that in this clinical trial children did not undergo GH therapy for long enough, which made the results of this trial inaccurate; however, the children were treated with GH for 3 years, which is the typical length of GH clinical trials.

PART II

WHAT IS ENHANCEMENT?

INTRODUCTION

The topics discussed in Part II are an extension of the topics discussed in Part I; however, Part II focuses on enhancement—the more controversial and less explored side of the treatment/enhancement distinction.

Controversial topics that surround enhancement include who ought to use enhancement practices, how we are to determine what practices are enhancement, and whether it necessarily follows that deeming practices enhancement also deems them unacceptable. In Part II, I focus on arguments that contrast enhancement with treatment. As a part of my analysis of enhancement, I examine several justice arguments and their conclusions concerning the nature of enhancement and what makes it different than treatment. Although I focus on enhancement in Part II, the concerns and arguments that are present in Part I are a part of my analysis of enhancement in Part II, namely what are acceptable and unacceptable ways to treat patients and which patients ought to be given priority in health care.

In Part II, I examine the justice arguments that are associated with practices that are thought to enhance our mental, intellectual, and physical capabilities. Some of the concerns that can be seen throughout Part II include

concerns about just distribution of enhancement practices, and the advantages and disadvantages conferred to individuals who use enhancement practices and how their use of enhancement practices affects individuals who do not use enhancement practices. What follows is an examination of these concerns, and others, and an examination of how treatment practices evade these concerns. I use performance enhancing drugs and cognitive enhancing drugs as these are two common forms of enhancement practices.

CHAPTER 4

SPORTS AND ENTERTAINMENT: DIFFERENCES IN PERFORMANCE ENHANCING DRUG POLICIES

In support of the goals of Part II of this dissertation, this chapter examines how drug regulation in sports, and the arguments supporting these practices, can inform conclusions concerning regulation practices in entertainment. At first glance, these two milieus may appear different, but by using the traditional methodologies of applied ethics, I show that entertainment and sports are similar in some important ethical respects. Considering these similarities, I ask whether arguments used to support drug policies in sports can and should be applied to entertainment. Conversely, I ask what weaknesses in the arguments for drug regulation in sports are revealed when these arguments are applied to a different milieu such as entertainment. More broadly construed, this chapter is a further attempt to discover what information is contextually important when determining what

practices ought to be considered enhancement and the ways in which we want enhancement practices to better our lives.

Most professional sports leagues¹ have policies that prohibit athletes from using a stipulated list of substances.² Athletes who violate these policies are typically fined or barred from participating in the sport for a period of time, or even permanently. Different leagues ban different substances; however, most leagues ban what they call performance enhancing drugs, including steroids, as well as illicit or illegal drugs, such as cocaine.

On a rare occasion, a 2008 article in the *New York Times* detailed the use of both types of drugs in a milieu outside of sports that does not ban drug use: music and film (Lambert, 2008). Yet no outcry corresponding to the distress that greets reports of drug use in sports accompanied this *Times* article. Here, I explore whether arguments offered for regulating drug use in sports should also apply to drug use in entertainment. I conclude that at least one argument is applicable to both sports and entertainment, and that the divergence in current policies is largely indefensible on theoretical grounds.

Although individual entertainers may be subject to contracts that ban them from using certain drugs while working on specific projects, the entertainment industry as a whole does not have a uniform banned substance policy³ that all entertainers must obey, such as the policies that athletes in individual sports leagues must obey. The absence of such a policy to which all

entertainers are subject and thus can violate is a possible explanation (among others) for the lack of public outrage when entertainers use drugs.

For instance, Sylvester Stallone, star of many popular action films, is among the entertainers who have admitted to using growth hormone (GH), a substance on most sports' list of banned substances (Weise, 2008). Despite his confession, his drug use is almost ignored by the media. Stallone is not on the front page of the *Times*; instead, a large picture of Major League Baseball (MLB) player Roger Clemens is on the front page, fending off accusations of being a drug dealer by a member of Congress in a federal court hearing (Wilson, 2008). That there is a uniform banned substance policy in sports to which Clemens is subject, but not one in entertainment to which Stallone is subject, can help explain the difference in responses to the use of drugs. But can these different policies be justified?

One conclusion to draw from the different policies is that the differences between sports and entertainment warrant a banned substance policy in the former, but not in the latter. For example, it can be argued that sports concerns excellences of human physical achievement in which all participants must abide by the same rules, including abstaining from drug use, if they want to participate. Following the rules of the game maintains the integrity of the process used to attain physical achievement (Maschke, 2009). In contrast, it can be argued that in entertainment, it is the value of

the finished product, whether that be a film or a concert performance, which is important, regardless of the means used to create that product.

Another conclusion to draw, however, is that there are theoretical reasons to believe that some of the criticisms applied to the use of drugs in sports ought to be taken seriously within the entertainment industry as well. I argue that at least one argument offered in favor of regulating drug use in sports, namely an ideal of fairness, also supports drug regulation in entertainment. I also consider that at least one argument against regulation in entertainment, namely that the differences in natural talent amongst entertainers create an initial uneven playing field, supports deregulation of drugs in sports. I conclude that theoretically the contemporary difference in treatment of drugs in sports and entertainment cannot be convincingly justified, although it may be explained by the argument that regulation in entertainment is not practically implementable.

This chapter is divided into two parts. Part 1 sets the stage by defining performance enhancing and illicit drugs. It also develops an account of sports and entertainment and briefly describes the use of performance enhancing drugs in each milieu. Part 2 presents two of the most important and common theoretical arguments for regulation in sports and then examines whether these arguments for regulation can also be applied to entertainment. I conclude by exploring the foreseeable obstacles of regulating drugs in

entertainment, yet argue that these obstacles should not prevent reevaluation of the status of drug regulation in entertainment.

Part 1: Setting the Stage

John Hoberman (2009) uses the term “doping,” a term used by regulatory agencies such as the International Olympic Committee (IOC), to refer to the act of taking performance enhancing drugs. Summarizing Hoberman’s (2009) definition of “doping,” this chapter defines the use of performance enhancing drugs as:

- 1) A pharmacological practice with the purpose of maximizing human capacity;
- 2) A pharmacological practice with the purpose of maximizing the capabilities of the mind and body to perform desired actions; or
- 3) A pharmacological practice not intended for the sole purpose of medical therapy⁴ but for the purposes included in (1) and (2) above.

Defined broadly, performance enhancing drugs include substances such as steroids and growth hormones that are taken for the purposes mentioned above. Although generally not included in sports leagues’ list of banned substances, some lists also include clauses that in some circumstances give leagues the power to ban over-the-counter (OTC) drugs, such as diuretics and laxatives, based on their potentially enhancing effects.⁵

This chapter defines illicit drugs as drugs that are illegal based on federal and/or state law as applied to the person in question. Illicit drugs are also on sports leagues' banned substance lists. One possible reason for banning illicit drugs is to allow the league to retain and promote sportsmanship and fair competition. Typically, these substances are also thought to be harmful to those who use them. Another reason is for reputation purposes: leagues do not wish to be known to support the careers of people engaged in illegal activities, whether these activities are drug use, spousal battery, theft, or any other negative or illicit behavior.

A third reason for banning illicit drugs in sports rest on the contingent connection between whether a drug is illicit and whether it improves performance (Hoberman, 2009). Some illicit drugs can enhance athletes' performance, while others can have either no effect or a negative effect on performance, depending on the type of performance and the circumstances. For example, the illicit drug marijuana can enhance an athlete's performance, perhaps by calming her before competition. However, this same drug can be detrimental to her competitive edge for this very same reason. Thus, league banned substance policies typically cover both performance enhancing and illicit drugs.

In entertainment, as in sports, drugs can fall under any of the relevant categories previously mentioned. Some drugs are performance enhancing, such as the steroids that sculpt an actor's body or the weight loss drug that

helps an actor to stay extremely thin. Some drugs are illicit and performance enhancing, such as the cocaine that enables an actor to remember his lines for a stage performance. Some drugs are simply illicit: the alcohol consumed by a teenage rock star, or the marijuana enjoyed by bands at festivals. The contingency of the relationship between whether a drug is illicit and whether it enhances performance is also present in entertainment. Some illicit drugs can act as performance enhancing drugs, while others, such as marijuana or heroin, will likely be harmful to theatrical or ballet performances. However, this is also true of drugs that are normally classified as performance enhancing drugs, such as steroids or growth hormones, which may give a singer a more muscular body but alter her voice in undesirable ways.

There are many different types of drugs and many different explanations for why drugs may be deemed unacceptable in a particular field. This section shows that the contingent relationship between whether a drug is illicit and whether it is also performance enhancing in sports and entertainment is very complicated and at times can be difficult to navigate. The next section provides one of many ways to characterize sports and entertainment to help navigate each field's relationship with drugs.

What Is Sport and What Is Entertainment?

Most philosophy of sport literature does not give a succinct definition of sport, and in fact, warns against doing so (Feezell, 2009; McFee, 2004).

Nonetheless, accounts in the literature converge on the following description: sports are a subset of game in which skill is necessary to achieve a desired goal and the activity has stability (meaning the activity is not a fad). A sport must also have a wide following, meaning that the activity is liked, watched, and/or played by many people (Feezell, 2009; McFee, 2004). Separating playful sports from the more competitive type of sports this chapter is concerned with, James Keating, author of one of the earliest pieces on sports and sportsmanship, adds that “victory is the telos” of sports (as cited in Feezell, 2009), with dedication and success in competition being the means to victory.⁶

Sometimes drugs can help athletes attain victory. Athletes who use drugs typically desire drugs’ ability to provide physical enhancement, including increased strength, muscle tone, and stamina. Athletes may also take performance enhancing drugs to enhance and prolong their careers; however, sometimes the detrimental health effects of performance enhancing drugs can prematurely end careers.

In sports, the preparation and training done before any actual competition plays a crucial role in whether athletes will be successful in such a performance; this may include the preparatory practice of taking drugs. For instance, laxatives and diuretics can allow professional boxers or wrestlers to compete in matches by helping them reach a suitable weight for their desired weight class.

In a scenario of this sort, the preparatory practice of taking drugs, although not as controversial as some other uses of performance enhancing drugs, helps boxers compete in the actual performance of the sport and gives them the opportunity to attain victory. Athletes may also desire performance enhancing drugs' ability to fight off inflammation, which is especially appealing to cyclists. Certain performance enhancing, OTC, and illicit drugs on banned substance lists can help athletes to be both mentally and physically in the position to perform, making "performance" a term that can include actions athletes take to prepare for a game and the game itself.

This definition of performance in sports can also apply to entertainment. A succinct definition of the entertainment industry is difficult to provide because there are varying views as to what it includes and excludes. For the purposes of this chapter, generally film, music, television, and staged performances such as theatre and Broadway plays are a part of the entertainment industry. "Entertainment" usually refers to any activity that brings joy, amusement, and a diversion from life's daily activities, such as playing board games or attending a music concert, while those who provide entertainment are entertainers. Using both of these definitions together, for the purposes of this paper, the term 'entertainment industry' includes the collective businesses of film, music, television, and theatre, in which entertainers give performances that provide audiences with an amusing diversion from mundane or cumbersome daily activities.⁷

Just as drugs can help athletes prepare for performances, drugs can also help entertainers prepare for performances. Entertainers and athletes who take drugs to enhance their performances, however, each do so seeking a different type of enhancement. Entertainers usually take drugs seeking to enhance the creative abilities facilitated by the mind, rather than the physical abilities of the body, such as the violinist who takes beta-blockers to relieve anxiety that may prohibit her from playing her instrument at her normal optimal level. Drugs can also provide entertainers with certain physical enhancements that athletes also find desirable, such as increased muscle tone, which a popular singer may want in preparation for the physical demands of a world tour.

Drugs have the potential to help entertainers prepare for performances and attain victory. Yet, unlike athletes, entertainers are not subject to a banned substance policy. The only common drug policy that entertainers are subject to is the law; however, if drugs can enhance entertainers' performances, just as they can enhance the performance of athletes, then perhaps a drug policy other than the law is warranted in entertainment for the sake retaining a consistent view of drugs. The next section looks at arguments that have been used to support the importance of drug regulation and determines if they also support the value of a consistent view of drugs in sport and entertainment.

Part 2: Arguments for Regulation

This section considers two arguments for a banned substance policy in sports: fairness in competition and maintaining ideals of human excellence. The goal of this section is not to defend these arguments, but to set out how the arguments and the pertaining counter-arguments are applied to sports, and to consider whether they may be applied to entertainment in a similar fashion.

Fairness in Competition

A common account of fairness in philosophy of sport literature is that it requires creating and/or maintaining conditions that ensure every competitor has equal opportunity to achieve victory (Loland, 2009). On this very basic view, fairness does not require that every athlete have the same natural abilities, but it does require a level playing field, when drugs are concerned, at the time of competition. What social or other background conditions “unlevel” the playing field is of course subject to dispute. If athletes’ use of banned substances is to be judged unfair, however, this can be explained by appealing to the idea that drug use is within those conditions that are thought to unlevel the playing field. In the following section, I give three versions of the argument from fairness, each of which gives descriptions of such possible conditions.

“Rules of the Game”

One way in which an argument from fairness in sports might be characterized is in what can be known as the “rules of the game” argument. Sports have rules and it is within the confines of those rules that we judge a winner and a loser (Donovan, 2009). Subsequently, breaking the rules in sports is cheating (Donovan, 2009) that skews the meaning of winning and losing and under what conditions athletes can win or lose. Some reasons sports have rules include the desire to maintain the integrity of sports, to show that the league does not endorse undesirable behavior, and to minimize the potential harms drug use can cause both athletes who use drugs and athletes who do not use drugs.

The “rules of the game” argument also concludes that a banned substance policy is in place to aid the creation and maintenance of conditions that are thought to ensure a level playing field for all athletes (as much as can reasonably be expected). This ideal is violated when some athletes disobey the policy because clean athletes are cheated out of the opportunity for victory (Brown, 2001) under the few conditions that can be made fair. On this account, the problem is that some athletes violate a policy that others obey, while gaining a competitive advantage by this violation—just as baseball players who use corked bats are gaining a competitive advantage that is not available to batters using league accepted bats.

A banned substance policy is also thought to protect clean athletes from possible harm that drug-using athletes can cause, which can come as physical harm or from social pressures to participate in harmful activities (Schneider, 2009). This policy serves as a tool to protect the health of athletes considering drug use by implementing repercussions for drug use, which will hopefully dissuade athletes from using potentially harmful performance enhancing drugs.

One criticism of the “rules of the game” argument is that it rests on the existence of the banned substance policy in the first place. The “rules of the game” argument states that there is a policy against drug use because drugs are unfair, and drugs are unfair because there is a policy against drug use; however, the argument does not tell us if the policy itself is fair. The existence of a banned substance policy cannot be used to justify that policy. Indeed, the abolition of a drug policy would create fair conditions by allowing any athlete to achieve victory with performance enhancing drugs. However, as long as the policy exists, and some athletes choose to obey it and others choose not to, sports cannot be a fair competition, regarding drugs.

This argument shows that there must be another interpretation of the argument from fairness that maintains that drug use in sports are unfair, regardless of whether there is an actual banned substance policy, an argument independent of rules. Before I explore this possible argument,

however, I will first apply the “rules of the game” argument—an argument from fairness—to entertainment.

When the “rules of the game” argument is applied to entertainment, it is for the most part unconvincing due to the structural and institutional differences between entertainment and sports. These differences include the fact that entertainers are not a part of a league⁸ and are more similar to free agents in sports than they are similar to athletes in a league; nor are entertainers competing for spots on an exclusive team. In entertainment, there are not any regulatory bodies,⁹ and subsequently, there are not any rules to break, except in special cases such as singing competitions on television.

One difference between sports and the entertainment industry that makes applying the “rules of the game” argument to entertainment problematic is that the entertainment industry does not subject entertainers to a uniform banned substance policy. The “rules of the game” argument cannot apply to entertainment based on this difference. Yet, if one believes that the goals and norms of entertainment are similar to those of sports, and like sports, drugs jeopardize goals and norms, then these ideas would justify a drug regulatory body in entertainment, or perhaps different regulatory bodies for different types of entertainment.¹⁰

The “rules of the game” argument states that by means of violating rules, drug-using athletes gain an unfair advantage at attaining victory that

clean athletes do not have. In sports, these advantages can be measured in points on the scoreboard or by cutting time on a stopwatch. Yet, even if there were a banned substance policy by which entertainers had to abide in entertainment, there is not an objective way to measure advantages that is comparable to a stopwatch like that in sports. The number of albums or film tickets sold might be an objective measure of success, but the subjective nature of tastes and interests that these sales rely on make them an unreliable measure of success, thus incomparable to a stopwatch. However, according to this argument, if there are not any rules, any advantages drug-using entertainers gain from drug use are not unfair because there are not any rules in place to violate.

“Norms of the Game”

A second interpretation of the argument from fairness, the version that does not appeal to the rules in place in sports, can be called the “norms of the game” argument. This argument bases fairness on norms that are traditionally a part of sports, norms that spectators would like to see maintained, or norms that might be defended as desirable for the sport in question. These norms include the idea that athletes who use performance enhancing drugs gain an unfair advantage over athletes who do not, an advantage that was not the result of hard work (Donovan, 2009; Loland,

2009). This argument concludes that norms can determine what is fair even if there were not rules in place to safeguard those norms.

“Normal Risks”

Another interpretation of the argument bases fairness on what is considered to be a reasonable and unreasonable risk to ask athletes to take. For instance, an athlete who chooses to train for competition for only 4 hours a day is taking a reasonable risk when she competes against an athlete who chooses to train for 8 hours a day and then subsequently loses the competition to the athlete that trained for longer. The athlete who chooses to train for 4 hours risks losing the game as well as risks getting injured during the game as a result of a lack of preparation. However, the risk of getting injured, as a result of being less prepared, is not an extraneous risk—that is, a risk that is not within what is reasonably expected to occur in competition. In contrast, expecting an athlete to take drugs so she can athletically match her opponents who may (or may not) be using performance enhancing drugs is not a risk that she can reasonably be expected to take, because the risks pose an unreasonable amount of harm to her health and career.

When one athlete takes or is suspected of taking performance enhancing drugs, athletes competing in the same sports will be faced with the following decisions: 1) to take drugs, in fear that others are taking drugs, and take the health risks that are associated with them; 2) to not take drugs and

take the risk of being physically harmed by physically superior, drug-using athletes and accept the greater chance of losing because a clean athlete cannot physically match a drug-using athlete; or 3) to train extra hard in hopes of being a physical match for a drug-using athlete, which is unlikely to happen since drugs allow the body to achieve feats that simply cannot be achieved by the hard working, unenhanced body. Overall, the clean athlete is faced with the decision to either take drugs or likely lose the game. Making athletes face this potential lose-lose decision is unreasonable and thus unfair. It requires an athlete, who does not desire to take drugs because of the degree of unreasonable risks to their health and career that they pose, to take a risk, which is unlike the degree of risk associated with a bad training ethic.

As in sports, it is unreasonable in the entertainment industry to ask entertainers who do not want to take drugs to do so, to be suitable competitors for drug-using entertainers. Just as in sports, it is unreasonable to ask entertainers to jeopardize their health and careers. It may be difficult, however, to determine whether entertainers who do not use drugs can match the performances of drug-using entertainers, while it is accepted that an athlete who does not take drugs simply cannot perform like a drug-using athlete. Nonetheless, entertainment, as an industry, may have a sense of fairness that can be violated just as sports have a sense of fairness that can be violated.

For example, let's say that an actor who wanted to audition for the starring role in an action film decided to take steroids to prepare for the audition. A second actor wants to audition for the same action hero role. The second actor decides to try to make his body look the part by exercising and eating nutritious food. When the second actor auditions for the role, he does not get the film role because the first actor who auditioned for the same role physically looks more like an action hero. Although drugs do not affect the acting abilities of either actor in this example, sometimes acting skills matter less than if an actor looks the part.

In this example, drugs helped the first actor to achieve a muscular body, which gave him an advantage during the audition. Yet, it would be unreasonable to ask the second actor to take drugs just to physically match the first actor because of the possible dangers steroids pose to his health and career. Arguably it is also unfair that the first actor received the film role with drugs because the second actor, who chose not to take drugs, is disadvantaged. If entertainment, as an industry, has a sense of fairness in which clean entertainers can be disadvantaged by drug-using entertainers, then this argument of what are reasonable and unreasonable risks also applies to the entertainment industry. Next I give a real-life example of performance enhancing drugs in the entertainment industry.

Sylvester Stallone, a popular film actor known for his roles in action movies, may be an example of the above scenario. Stallone has admitted to

using GH, and has even advocated its use among older adults for purposes such as slowing down the aging process, which is not its intended use (Foley, 2007, Weise, 2008). If Stallone used GH while preparing for a film role, arguably he benefited from the drug's ability to provide muscles faster than an individual could if he were just exercising and lifting weights. Although it is difficult to prove that Stallone received a film role due to his enhanced physique,¹¹ his GH use was discovered when he was found to be in possession of GH at an airport while en route to promote one action film and to begin filming another (Foley, 2007, Weise, 2008). This means that it is possible that he used GH to receive and subsequently to perform well on films. It is this possibility that is potentially unfair.

Formulated in one of the aforementioned ways, a “norms of the game” argument would provide a justification for a banned substance policy in sports and entertainment, but requires an explanation of why the advantages drug-using athletes receive are unfair. Why, for example, should there be rules against drug use when rules are not designed to level the playing field for athletes who lack natural physical attributes, such as height (which can give an athlete an advantage over an athlete without this natural attribute) or for entertainers with a lack of natural talent (which can give an entertainer an advantage over another entertainer without this natural attribute)?

A possible reason for this is that some drugs are either exogenous or artificial substances, whereas a person's height, speed, and talent are achieved without the help of such substances. To some, this argument may seem arbitrary; however, it is an argument rooted in ways that competition can be made fair, or the playing field can be made even. These ways can include reliance on natural talents and drug regulation. Similarly, the "norms of the game" argument claims that drugs make natural talent, brute luck, and genuine hard work, that often times determines a winner and loser in a game, unimportant when they should be central to fair and entertaining competition.

Robert J. Donovan (2009) offers a different perspective on the "norms of the game" argument and states that even if athletes' drug use did not make the playing field uneven, sports are an uneven playing field without drugs. The nature of sports is such that without the use of drugs, competitors do not have equal access to victory. Athletes have varied levels of natural talent, skill, and financial constraints that create unfair conditions in sports by giving the talented, skillful, and rich an advantage over the talent-less, skill-less, and poor. Athletes also have varied access to certain technologies such as advanced training equipment, aerodynamic clothing, coaching staffs, nutritional advice, and other tools that increase the likelihood of victory (Donovan, 2009). Because of these inequities, athletic competitions are uneven playing fields even without drugs.

Donovan's (2009) argument merely points out how access to victory in sports can be affected by actions and conditions other than substances. However, it does not tell us if the uneven playing field created by performance enhancing drugs should be accepted as an ordinary part of sports, just as the uneven playing fields created by varying degrees of natural talent are accepted. Donovan's argument also ignores the fact that superb nutritional advice or exceptional coaching staffs are within the rules of sports, while the use of performance enhancing drugs are not. This argument does not adequately address the fairness issues that are created when drugs contribute to an uneven playing field in sports. Donovan's argument may, however, provide information on how arguments that consider the innately uneven playing field in sports apply to the entertainment industry.

Some entertainers have natural abilities to sing or dance, play an instrument, or act, while others have to work and train very hard to be good singers or actors and still may not be as good as those with natural abilities. Some entertainers have access to equipment and coaches who can make them appear to be better singers (as in the case of auto tune in music) or actors, like athletes who have access to trainers and running coaches. So, at least in this sense, the entertainment industry also starts off as an unequal playing field; but we would hardly say that a singer with natural talent has an unfair advantage over a singer who does not have natural ability to sing.

Again, though, acknowledging the presence of innate inequities does not tell us if we should prevent the ones created by performance enhancing drugs. One clue that we have that tells us that perhaps we should care about the inequities created by performance enhancing drugs in sports are the presence of rules, including a banned substance policy. If entertainers were subject to rules like those to which athletes are subject, rule violation would be an argument supporting the unfairness of the advantages obtained through drug use, just as it is with athletes; however, since no such policy exists in entertainment, this argument supports drug regulation in sports, but not in entertainment.

I have given two versions of the fairness argument, one version that applies to only sports—“rules of the game” argument—and one version that applies to both sports and entertainment—“norms of the game” argument formulated as reasonable and unreasonable risks. Next, I discuss another argument that may support drug regulation in sports—human excellence—and determine if it supports drug regulation in entertainment.

What Is Human Excellence?

The ultimate appeal of both versions of the fairness argument hinges on the assumption that the goal of sports is victory without drug use. The “human excellence” argument, often seen in philosophy of sports literature, stems from this assumption. The following discussion considers possible

answers to the question ‘what is the goal of sports?’ and whether that goal warrants drug regulation. I then apply this same argument to entertainment.

According to Murray (1983), “the rules of sports are arbitrary in the sense that they could be otherwise,” but it can also be argued that the rules are not arbitrary. Rules maintain what the community of those who enjoy, play, and support a sport value and find “meaningful” about that particular sport. This idea suggests that sports have a particular notion about the goals of sports and what it means to excel that maintain the values of the sports.

According to the “human excellence” argument, sports concern the achievement of excellence within the specific confines of the sport and through efforts to better or master natural abilities, such as the ability to run fast or jump high (Murray, 1983). Although performance enhancing drugs could be used to master innate abilities, according to this argument, performance enhancing drug use is not one of these specific limitations.

Performance enhancing drugs also cheapen achievement in sports by making athletic victories less praiseworthy because the victories were not the sole result of hard work. Performance enhancing drugs make athletes superior in strength and increase their chance of victory beyond what spectators would normally expect from a human being, making them abnormal (Brown, 2001). With drugs, sports are no longer about athletes’ hard work, but are about how far the human body can be pushed with the help of drugs. According to the “human excellence” argument, this is

unwanted because it deviates from the accepted norms of the game, which include excellence by means of dedication and effort (Brown, 2001). This argument maintains that human excellence in sports is the attainment of victory through the efforts exerted by the unenhanced body. Because this particular idea of human excellence exists in sports, it is argued that drugs should be regulated to make sure that its goal is achieved and that the norms of sports are upheld.

The “human excellence” argument, when applied to sports, is vulnerable to two criticisms. The first is that most athletes are abnormal without the use of drugs, where abnormal means that their bodies are able to do things that the average person cannot do. The average person cannot slam dunk a basketball or complete a gymnastic routine (Brown, 2001). Similarly, most clean entertainers are abnormal by this standard because they are able to perform creative tasks, such as acting in movies or performing musical concerts for thousands of people, which the average person cannot do. The “human excellence” argument does not acknowledge that most athletes are abnormal even without the use of drugs. For this reason, this argument has limited application to both sports and entertainment.

Second, this argument also does not take into account that it is only a modern idea that human excellence in sports is achievement sans drugs. Although the drugs used in sports before the twentieth century were far less potent and effective than the performance enhancing drugs that have been

available since the 1960s, there are some examples of drug use before the 1960s that resemble modern drug use (Hoberman, 2009). For example, in 1894 French sports, physician Phillippe Tissié gave several types of a beverage to a cyclist to measure its performance enhancing value on the cyclist. It was not until the commercialization of sports that the idea that drug use was not in accord with sportsmanship was brought to the forefront of public attention (Hoberman, 2009). Next, I consider how the “human excellence” argument and its criticisms apply to the entertainment industry.

In contrast, when this argument is applied to entertainment, it can be used to argue that regulating performance enhancing drugs is of no concern to the entertainment industry because it has a different view of human excellence than that of sports. In the entertainment industry, spectators judge whether an entertainer has excelled by the value of the finished product; we judge the individual song, film or performance, not the means of its creation. It is rarely questioned what means an entertainer used to write a good song. This difference between sports and entertainment exists because most forms of entertainment’s ideal of human excellence is producing a quality product that will be popular amongst spectators, regardless of how that quality is achieved. This is especially true of popular music. According to this argument, because the process of achieving excellence is of little to no importance and the goal of entertainment is not mastery of a craft through means of an unenhanced body, the type of drug regulation that exists in

sports is not necessary for the entertainment industry. If this is empirically true, then the human excellence argument applies to sports, but not to the entertainment industry.

If the examples of centuries of drug use in sports break down the argument that human excellence in sports are achievement without drugs, then one could argue that performance enhancing drugs should not be regulated in sports just as they are currently not regulated in entertainment because both spheres would then have the same ideal of human excellence—achievement, regardless of the means to achievement. Nonetheless, the widely accepted view is that excellence in sport is victory without drugs, so at present sports and the entertainment industry do have different ideals of human excellence.

Conclusion

In this chapter, I have shown how two standard arguments—the argument from fairness and the argument from human excellence—are used to support banned substance policies in sports while considering some criticisms of those arguments. I have also shown how those arguments and criticisms apply to the entertainment industry, as it is generally understood. These arguments are also discussed in Part I of this dissertation, albeit with different types of enhancement, and with different conclusions drawn. When contrasting enhancement practices that are used by normally functioning

individuals with practices that are used by abnormally functioning individuals (now considered treatment), we have to consider who is disadvantaged or who is treated unfairly. In Part I, I conclude that some times the individuals who are unfairly treated are the normal functioning individuals who use medical intervention for enhancement. However, the issue of fairness changes when it is applied to sports and entertainment, namely that individuals who use performance enhancement practices can greatly disadvantage normal functioning individuals.

Both sports and entertainment have a sense of fairness that can be violated suggesting the appropriateness of drug regulation in both arenas. However, if one takes seriously the claim that sports are inherently unfair due to natural talents, this suggests that the absence of drug regulation in sports could be a way to level the playing field. This may be similar to the idea that growth hormone therapy could be one way to level the playing field if we take seriously the claim that short statured individuals are disadvantaged in the work force, as discussed in Part I of this dissertation. However, the issue of leveling the playing field to make competition fair in both sports, entertainment, and growth hormone therapy faces the issue of raising the bar of what is considered normal or adequate will change the standards for what is considered normal or adequate for everyone involved, normal or abnormal functioning. Subsequently, what was once considered normal will now be considered abnormal and the group of individuals who are

now abnormal will have to be raised to a new, higher level of functioning.

This in turn, could exponentially change what is normal.

One conclusion that both Part 1 and Part 2 share is that enhancement practices are typically considered acceptable when used by individuals who are functioning abnormally; however, because of issues of fairness in competition, some therapeutic drugs are banned and therefore unacceptable. This means that the treatment/enhancement distinction does not perfectly match with a distinction between acceptable and unacceptable, as argued throughout both Parts I and II of this dissertation.

This chapter does not argue for one particular idea of sports or the entertainment industry; however, it does offer some idea of what components make up each sphere, including what human excellence means in each milieu. Sports and entertainment differ in their contrasting ideals of what it means to excel, suggesting the appropriateness of drug regulation in the former but not in the latter. Two different conclusions might be drawn from this discussion: that sports ought to reevaluate banned substance policies, or that the entertainment industry ought to consider establishing drug policies similar to those that exist in sports.

By examining the drug regulatory arguments' application to sports, I conclude that these arguments also have varying degrees of application to entertainment, despite drugs' ability to enhance performance in each sphere. Nonetheless, there are practical issues that will most likely never lead to the

creation of a banned substance policy or a drug regulatory agency, like the IOC, for entertainment. These practical issues also highlight the inherent differences between sports and entertainment.

If one were convinced that the theoretical arguments for drug regulation in sports warrant regulation in entertainment, several obstacles would stand in the way of putting regulation into practice. For instance, it would have to be determined who would be responsible for enforcing a banned substance policy. Sports have various regulatory agencies such as the IOC, World Anti-Doping Association (WADA), and the United States Anti-Doping Association (USADA), but currently no such organization exists in entertainment. Would the Screen Actors Guild (SAG) take on the role of regulating drugs for actors? It would also have to be determined who would be subject to drug testing. Musicians, dancers, and actors are not the only performers in the entertainment industry, unlike athletes who are the only performers in sports. Also, entertainers travel much more than athletes and the entertainment industry encompasses many kinds of performances (staged performances, appearing on talk shows, photo shoots, etc.), making evading drug tests easy, but making it hard to create realistic and enforceable repercussions for positive tests.

The obstacles in the application of drug regulatory policies in entertainment show that it would be difficult to create a banned substance policy, and test and punish accordingly. However, these obstacles do not

invalidate the theoretical arguments that support regulation in entertainment. If entertainment and sports are indeed similar in the ways I propose, then the status of drug regulation in entertainment and in sports, whether that is to regulate or deregulate drugs, should at the least be reevaluated. The different treatment of drugs in entertainment and sports cannot be justified based on the grounds of obstacles of regulating drugs in entertainment. Rather, the obstacles only explain why a banned substance policy is currently not in place in entertainment and why it would be difficult to implement such a policy in the future.

Not regulating drugs in entertainment gives a drug “pass” to entertainers that is not given to athletes who may be in a similar profession. If it is true that the performances of athletes and entertainers can be enhanced by performance enhancing drugs, then drug regulation in sports, but not in entertainment, is an example of inconsistent drug regulation. Theoretically, arguments against drug regulation in entertainment and arguments for regulation in sports should be taken seriously in both spheres for the sake of retaining a consistent view of performance enhancing drugs.

Endnotes

1. Only professional athletes in professional sports leagues such as Major League Baseball (MLB) and National Football League (NFL) will be discussed in this chapter.
2. For example, in Major League Baseball (MLB), the Health Policy Advisory Committee (HPAC) is responsible for education about drug use, testing protocols, and similar activities according to the league's banned substance policy. The policy prohibits eight, Schedule II and Schedule I substances including but not limited to cocaine, LSD, opiates, and marijuana. The non-exhaustive list also prohibits forty-five Schedule III steroids, and anabolic androgenic steroids that are not covered by the Schedule III classification.
3. This use and subsequent uses of "banned substance policies" refers to their role in drug regulation.
4. A person may take some drugs for the sole purpose of medical therapy, yet they may have enhancing effects for the user. In cases like these, one must appeal to the league's banned substance policy, which will either allow or disallow a person to take the drugs. Some leagues allow athletes to appeal to the regulatory body that governs their sports if they need to use a drug for therapeutic purposes but it is banned in their sports for its enhancing abilities. If the appeal is denied, athletes may be prevented from receiving the genuine therapeutic benefits of a drug but they must forgo these benefits if they wish to take part in professional sports that require its players to obey a banned substance policy.
5. Furthermore, activities such as training schedules, laser eye surgery, strict dieting practices, practicing at places of high altitudes, sleeping in hyperbaric chambers, and other similar practices, may be considered "enhancement" practices, or include partaking in enhancing substances, but because they are not substances themselves, they will not be considered in this chapter.
6. There are some exceptions, such as the Special Olympics, in which victory is not the telos of the sports.
7. This definition could include pornography, which is a type of film, middle school orchestra concerts, which are a type of music, and other instances of film, music, and theater not specifically mentioned in this chapter. Instances such as these are excluded from my discussion of entertainment as they are either not respected forms of entertainment or not professional.

8. An entity that is currently present in entertainment that is the most similar to a sport's league is the Screen Actors Guild (SAG), although it is very different from a sport's league. The main difference is that an entertainer does not have to be a SAG member to be an entertainer, whereas an athlete must be a part of a league to play professional sports.
9. The Screen Actors Guild does not have an official policy on drug use.
10. The only common drug policy that entertainers and athletes are subject to is the law, which has its own set of repercussions.
11. It is possible that his acting abilities (which I doubt), or his fame and reputation (which could have been created with the use of drugs) won him film roles.

CHAPTER 5

COGNITIVE ENHANCING PRACTICES: CHALLENGES TO IDENTITY AND AUTHENTICITY

A recent *New York Times* article concerning the prescription of psychopharmaceuticals to nonpathological children is representative of an increasingly common occurrence in which issues in bioethics seep into popular culture. This article reports that a Georgia (USA) physician intentionally, falsely diagnoses his school-age patients with attention deficit hyperactivity disorder (ADHD) if the patients are performing poorly in school and are a part of a low-income family. These false diagnoses allow him to prescribe psychopharmaceuticals like *Ritalin* or *Adderall* to his patients to help modify their behavior and cognition to facilitate academic success in financially struggling schools (Schwarz, 2012).

This *New York Times* article raises many theoretical and practical issues concerning just enhancement practices that are at the forefront of this dissertation. Some of the relevant issues include fair distribution of

enhancement practices, the place of nonpathological individuals in enhancement discourse, and the role of the treatment/enhancement distinction in distributive justice arguments. Throughout this chapter, I revisit the *New York Times* article to aid my analysis of these concerns within the context of cognitive enhancing practices, practices that are meant to improve individuals' mental capacities.

In this chapter, I canvass several objections to cognitive enhancing practices, including objections that utilize the treatment/enhancement distinction to draw conclusions about the unacceptability of distributing psychopharmaceuticals to normally functioning individuals. In the case that these objections also apply to other types of enhancement practices that are discussed in this dissertation, I will give an analysis of how the objections either change or do not change when applied to these other enhancement practices.

Anders Sandberg (2011) has suggested that these types of concerns may only be cultural, social, or political concerns, rather than ethical concerns. When responses to theoretical and practical concerns are used to permit and withhold access to cognitive enhancing practices, however, these concerns become ethical issues that can influence access to opportunity and influence our ability to live the kind of lives that we desire to live. In this chapter, I also explore how cognitive enhancing practices' affect our lives and the kinds of opportunities that cognitive enhancing practices can create.

Biological and Nonbiological Dilemmas

Cognitive enhancements are practices that aim to amplify or improve the mind's capabilities (Juth, 2011). These capabilities can include, but are not limited to the ability to better process information (Sandberg, 2011), recall information, have longer attention spans, and improve planning and problem solving skills (Housden, 2011). Cognitive enhancement practices such as memory exercises aim to improve cognitive skills by means of improving our cognitive abilities—not our biology. Cognitive enhancing practices such as psychopharmaceuticals, noninvasive brain stimulation (NIBS), and transcranial magnetic stimulation (TMS) aim to improve our skills by means of improving cognition or mood at a biological level.

Whether cognitive enhancing practices improve cognition and how they improve cognition—biologically or not—is often seen as relevant to their acceptability for normally functioning individuals. The relevance of the biological or nonbiological nature of cognitive enhancing practices is a source of contention that other enhancement practices also face. The argument typically follows this model: Enhancement practices that biologically improve our capabilities are less acceptable when used by normally functioning individuals, but more acceptable when used by abnormally functioning individuals. Next, I use psychopharmaceuticals to illustrate this dilemma and the relevant justice questions, including questions about acceptability.

Psychopharmaceuticals, drugs that alter specific psychological

capacities (Farah, 2004), cannot directly affect cognition; rather, they improve cognition by targeting neurotransmitters and neurons in the brain that control cognition. Most psychopharmaceuticals target specific abilities such as focus or memory retention (Housden, 2011). There is some compelling evidence to support the effects on cognition by psychopharmaceuticals, such as *Adderall*, *Ritalin*, and *Cymbalta* (Murray, 2006; Sandberg, 2011; Wolpe, 2002). Other more common drugs such as caffeine and nicotine are typically used as stimulants that temporarily and minimally improve cognitive abilities. Some college professors, students of all ages (but primarily college age students), and pilots (among many other professionals) have all been known to use these cognitive enhancing drugs to improve alertness, improve abilities to retain information, and sift through large amounts of information and discard the irrelevant information (Sandberg, 2011).

Some drugs can potentially offer individuals great cognitive effects, but their uses as cognitive enhancers are still considered experimental. For example, the drug *Propranolol*, a beta-blocker commonly used to treat hypertension, is a potential neurocognitive enhancement that is still considered to be in the testing phase, but shows promising benefits to cognition. *Propranolol* has been the focus of studies that hope to show that the drug can benefit individuals who have experienced traumatic events but have yet to develop PTSD by preventing the onset of PTSD and its debilitating effects. For these individuals, *Propranolol* may be able to lessen,

or even completely erase, the memory, and/or emotions associated with traumatic events (Henry, 2007; Kolber, 2011; Levy, 2009).

Using *Propranolol* to treat symptoms of PTSD before an individual is diagnosed with the disorder is similar to using vaccinations in that using *Propranolol* is a preventive measure. Just as vaccinations can be viewed as treatment or enhancement practices, so can cognitive enhancing practices. However, as a goal of this dissertation is to show that the treatment/enhancement distinction has minimal importance to issues of distributive justice, as evidenced by the accepted and encouraged use of vaccinations, the treatment/enhancement distinction has little relevance to the acceptability of vaccinations.

Similar to the use of vaccinations, the treatment/enhancement distinction has little relevance to the acceptability of cognitive enhancing practices. Instead explanations of health and how they are utilized by accounts of just health care, as discussed in Chapter 2, have more impact on determining acceptability of cognitive enhancing practices such as the use of *Propranolol*. For example, preventing disease or adverse physical and mental conditions is a typically acceptable use of medical resources. If using *Propranolol* to prevent PTSD is considered a therapeutic practice then under an account of just health, such as Daniels' (1985, 2001) account, *Propranolol* would be an acceptable preventive measure for individuals showing symptoms of PTSD. If using *Propranolol* to prevent PTSD is considered

enhancing a mental state, *Propranolol* would still be a preventive-therapeutic measure and in accounts of just health care, like Daniels' (1985, 2001), that *Propranolol* maintains health makes it acceptable.

If future research were to show that *Propranolol* could prevent the effects of bad memories in individuals who do not show signs of PTSD, then the treatment/enhancement distinction as well as the concepts that the conceptual distinction relies on may be more relevant to determining acceptability of using *Propranolol*.

Fast and Easy Remedies

The drug *Adderall* is commonly at the forefront of concerns about quick and easy remedies to abnormal cognitive functioning and its associated hardships. *Adderall*, nicknamed the “smart drug,” is a schedule II drug that combines amphetamines and dextroamphetamines to treat ADHD. When a patient experiences low social or academic functioning due to inattentiveness, poor memory, being easily distracted, difficulty with staying quiet or staying still, and/or other similar impairments, and a physician attributes these symptoms to ADHD, she may prescribe *Adderall* as a therapeutic measure (*Adderall*, 2012; *Adderall and Smart Drugs*, 2011) to remedy these symptoms.

Adderall, like most drugs, has some risks and side effects, including dependency, aggressive behavior, and strokes, among other conditions, but it is still a widely popular drug among individuals diagnosed with ADHD.

These risks are typically viewed as worthwhile when individuals have ADHD. These risks are typically viewed as not worthwhile, however, when *Adderall* is used by individuals who do not have ADHD, but desire the effects on cognition that the drug can offer (Schwarz, 2012). Although *Adderall* may remedy symptoms associated with ADHD, it is not meant to directly remedy the conditions associated with poor cognitive functioning of individuals with or without ADHD.

A commonly cited criticism of cognitive enhancement practices is that biological cognitive enhancement is an easy or quick fix. According to this argument, biological enhancement is a solution to a problem that requires a much bigger, and perhaps altogether different, solution. In a sense, biological enhancement is a small bandage for a massive wound. For example, referring back to the *New York Times* article mentioned at the opening of this chapter, Dr. Michael Anderson prescribes *Adderall* to his elementary school age patients with poor academic performance. Anderson himself admits that *Adderall* is not a prescription for ADHD but a prescription for the bigger problem of poor academic performance in schools that are ill-equipped to help struggling students (Schwarz, 2012).

If individuals have ADHD, *Adderall* is meant to treat the symptoms that may impede their academic success, not to directly treat their poor academic performance per se. When individuals do not have ADHD and subsequently do not have symptoms associated with *Adderall*, the drug can

be thought of as treating poor academic performance, low income, or a financially struggling school and all the ills that are associated with schools that do not have enough money to accomplish their goals. And as there is no drug that is meant to treat these kinds of things, *Adderall*, in the instance of no diagnosis of ADHD, is intended to treat social injustices that cause poor academic performance. Dr. Anderson himself admits that prescribing *Adderall* to non-ADHD kids is an inexpensive fix for a nonmedical problem. As he puts it, society cannot or will not modify a struggling child's environment to make it more conducive to her success, so prescribing *Aderrall* is his way of fixing the child so that she can successfully function in the less than desirable environment that she is required to function within (Schwarz, 2012).

In cases such as that of Dr. Anderson, *Adderall* is a tool of social justice. *Adderall* is used to tip the success scales in favor of those that do not have the means to succeed and as an aide when no one is actively working to diminish the impediments to their success. *Adderall* then becomes an instrument of righting the wrongs created by misdistribution of wealth and the effects of that poor distribution, including inadequate schools, low-paying jobs, and poor health care. A simple mixture of amphetamines, dextroamphetamines, and sugar cannot right these social injustices; or so this common argument against biological cognitive enhancement advocates.

According to criticisms of actions such as those committed by Dr. Anderson, cognitive enhancements such as *Adderall* are a quick fix to a very big problem, and as such, not a treatment for the real problem but a surface-level treatment (Sandberg, 2011). Social injustices that contribute to poor academic success are the real issue in instances of individuals who are not diagnosed with a cognitive or intellectual disorder but are given drugs to help them succeed. Thus, remedies to social injustices are also options for rectifying poor academic performance. This solution also avoids falsely diagnosing individuals with intellectual or cognitive impairments in which there is no evidence to support such a diagnosis.

Sandberg (2011) gives an example of a utilitarian account of using drugs for enhancement purposes. According to this argument, our social environment requires us to have a higher-than-normal level of cognition that previously was not required of us to adequately function in society. He focuses on the societal, career, family, and personal demands that individuals face. These demands have created the desirability and need for cognitive enhancing drug use by individuals without cognitive or intellectual impairments as both face escalating demands on their time and cognitive skills. Cognitive enhancement practices allow us to meet these demands and thrive in a society that requires more focus, better memory retention, and other improved cognitive skills.

Continuing the utilitarian account of cognitive enhancing practices, practices such as taking drugs or even NIBS can be viewed as quick, yet feasible solutions to complex problems. When considering whether it is more prudent to change individuals or society we have to consider the benefits of changing the individual rather than changing society (Sandberg & Savulescu, 2011). There may be some reason to prefer social changes to individual changes, including safety and likelihood of success, but there might be some reason to prefer biological changes to an individual rather than social changes. These reasons include the idea that it is much harder to change society. It is easier to change an individual's financial and social situation by giving her drugs than it is to implement social change that improves an individual's financial and social situation.

It is also a timely endeavor to create social change. When the demands are current, a solution that is also current is often times more desirable than a solution that may take decades to implement; so long that the individual in question does not get to experience the benefits of social change. Thirdly, it is also a financially costly endeavor to create social change when compared to the price of a drug. In the instance that the benefits of biological cognitive enhancement practices outweigh the benefits of social change, we have to consider utilizing cognitive enhancement practices (Sandberg & Savulescu, 2011).

Although cognitive enhancement may be desirable as an immediate and cost-effective fix for cognitive impairments, the risks associated with cognitive enhancement practices when used by cognitively normal individuals must be taken into consideration. The risks associated with cognitive enhancement practices are real for all individuals, but those when risks are taken for nontherapeutic purposes, the acceptability of risks diminishes.

Another concern that accompanies the use of cognitive enhancements is the concern that people may feel pressured or coerced to use cognitive enhancing drugs if other people are using drugs (Housden et al., 2011). Inevitably, if a large group of people start to use drugs, the baseline of normal functioning will be raised, making those who were once functioning at a normal level, now functioning at a level that is below normal. In efforts to keep up with high-functioning individuals, more people may feel it necessary to take cognitive enhancing drugs to remain normal. Like concerns about risks of intervention, concerns about social pressures also concern normal and abnormally functioning individuals. Next, I give an account of just health care that gives consideration to individuals functioning at both normal and abnormal levels.

Prioritarianism

The outcomes of cognitive enhancing drug use, including what tasks cognitive enhancing drugs can be used to accomplish and how successful drug

use is for accomplishing tasks, is the focus of utilitarian accounts of cognitive enhancing drug use. Whether drug use is for the purpose of treating the ailments of abnormally functioning individuals or enhancing the capabilities of normally functioning individuals does not reflect the acceptability of intervention within utilitarian accounts of cognitive enhancing drug use. Accordingly, normally functioning individuals and abnormally functioning individuals are both given some consideration for the use of medical interventions. This conclusion is shared with prioritarian accounts of cognitive enhancing drug use, although the justification is different.

Both normally functioning and abnormally functioning individuals are given consideration for medical intervention under the prioritarian account because prioritarianism prioritizes the least well off. Based on this idea, it would be within the parameters of prioritarianism for some normally functioning individuals to use cognitive enhancing practices for strictly enhancement purposes if they were considered the least well off whether financially least well off or least well off in regards to resources or wellbeing. Normally functioning individuals who are at a disadvantage because of their normal level of cognitive or intellectual capabilities would be allowed to use enhancement practices for treatment purposes if that disadvantage were to make them the least well off. In instances like this, when applications of prioritarianism disregard the treatment/enhancement distinction,

determining who is the least well off and in what ways they are the least well off determines what justice requires.

It may be particularly difficult to determine if normally functioning individuals are the least well off based on mental and intellectual capacities, although it may be easier to determine if some abnormally functioning individuals are disadvantaged. Referring back to the example of using *Adderall* to improve cognitive capabilities, if there was an instance when two individuals wanted to work for a high pressured, fast-paced software design company and one individual was disadvantaged by her diminished cognition and there was another individual that wanted to work for the company who was disadvantaged by his normal cognition, both the normally and abnormally functioning individual may be entitled to *Adderall* within a prioritarian (sans treatment/enhancement distinction) account of just health care. To determine which individual would be distributed *Adderall*, we would have to determine which individual is the least well off. Richard Arneson (2010) states that a theory of justice that prioritizes the least well off has to consider individuals' advantages and disadvantages, as well as individuals' capabilities when determining who is the least well off. In addition to taking into account individuals' disadvantages and capabilities (Arneson, 2010), we also have to consider their financial status, and their access to medical resources. To determine who ought to be distributed *Adderall* to help them

successfully complete their work tasks, we would have to take into account each individual's capabilities and their economic wellbeing.

The point is that there are accounts of distributive justice in health care that can give normally functioning individuals at least some consideration when allocating resources. As the accounts maintain, normal human functioning is not always an understood unacceptable use of medical resources and abnormal functioning is not always an understood acceptable use of medical resources. However, if we were to apply the treatment/enhancement distinction to a prioritarian account, we would still have to determine who is the least well off and in what ways they are the least well off. Additionally, we would have to determine if their disadvantages are the result of their choices. Therefore, adding the treatment/enhancement distinction to prioritarianism accounts of distributive justice adds more determinants of justice in health care.

Discussion

Enhancement practices are those practices that improve upon genes or environmental factors or a combination of both genetic and environmental factors to give us better mental or physical capabilities. For example, we can manipulate genes that have been identified as being responsible for memory capabilities (Sade, 1998) or we can increase our memory capabilities by using memory exercises and games. Typically, genetic enhancement is much more

ethically controversial than nongenetic enhancement practices, especially in the case of normally functioning individuals. Sandberg and Savulescu (2011) suggest that as we learn more about unconventional cognitive enhancement practices genetic enhancement practices may become a common and accepted practice of human improvements.

The practice of cognitive enhancement, either biologically or non-biologically, is meant to improve our cognitive capabilities, which can translate into an increase in the quality and sometimes quantity of life by giving us capabilities that we may not otherwise possess. These capabilities can then translate into opportunities; opportunities that if taken advantage of, can further improve our lives. These opportunities can include access to prestige, education, jobs, and financial wealth. For example, Sandberg and Savulescu (2011) state that cognition can be thought of as a capital good, meaning that increasing cognition can increase our potential capital earning capabilities. An increase in cognition can then mean an increase in general intelligence and that there is some link between job performance and general intelligence. And better job performance can mean significant financial gains. Sandberg and Savulescu (2011) note cognition's potential as a capital good to reinforce the idea that enhancing cognition has personal benefits to individuals. They also note that the personal benefits of enhancing education, even if it is by means of cognitive enhancement practices, can positively impact society by reducing social costs. This means that cognitively

enhancing individuals can also benefit society as a whole and not just benefit the individual.

Enhancement practices are only as good the advantages they confer on individuals. And because of the potential enticing benefits of enhancement practices, when determining possible responses to theoretical questions that can have practical application, as a matter of justice as fairness, we must balance the interests of normally functioning individuals that seek enhancement practices and abnormally functioning individuals that also seek enhancement practices. We have to look at the justifications for our reasons for withholding cognitive enhancement practices from individuals who are considered to be functioning normally, especially when doing so could mean withholding opportunities. We also have to consider whether the benefits of drugs make them a more viable option than social change or whether social change is a more formidable goal.

Identity, Personhood, and Authenticity

If the mind is the gatekeeper of our identity, then when determining if there are relevant differences between biological and nonbiologically cognitive enhancement practices, we must consider cognitive enhancement practices' impact on identity. In Kamm's (1993) influential book "Listening to Prozac" he documents personal testimonies of individuals who took the drug *Prozac* and then reported that they felt more like themselves, as if they had

shed their shy, inverted personality for a more vibrant, and truer personality. This demonstrates one view of cognitive enhancement practices—they force us to consider our personhood (Wolpe 2002). Cognitive enhancement practices force us to consider what makes us who we are and who we want to be. If cognition makes us who we are and helps us to be the kind of person that we want to be, we have to examine how changing cognition also changes the person that we are and the changes the kind of person that we hope to become.

It is typical to question how brain disease or injury will affect our cognitive functioning and in turn how disease or injury will affect our identity. If the mind's reduced functioning can be said to significantly change an individual, so much so that she can be thought of as being a different person as in the case of a person with Alzheimer's disease, then we have to consider if augmenting cognition can also be thought of as changing an individual's identity (Wolpe, 2002). With the case of Alzheimer's disease, people have decreased cognitive functioning and may lose interests in activities that once brought them pleasure and may forget people that were once significant parts of their lives. In the case of enhanced cognition, it is plausible that interests may also change as cognitive capabilities changes.

The foundation of concerns about how identity changes with any form of cognitive enhancing practices is a concern for retaining or creating an authentic self. Carl Elliott (2005) states that authenticity is an ideal to strive

for because authenticity is a means to being complete and fully ourselves through the process of self-discovery and self-fulfillment. In *The Ethics of Authenticity*, Charles Taylor (1991) describes authenticity as seeking self-fulfillment. Furthermore, authenticity becomes a quest for individualism. Taylor describes individualism as the idea that we have the right to shape our lives based on those ideals that we determine to have meaning and value. Additionally, this right to shape our lives imparts a duty to discover what it means to be true to ourselves and then we are called to follow through (Taylor, 1991).

Authenticity, as an ideal to be achieved, also includes the idea that if we do not discover our desires, our talents, and abilities, we are not getting the most out of our lives— we are not living out life to its fullest potential. The goal is to be who we are meant to be and if we were to fail in our attempts to accomplish this goal, we would not be true to who we are meant to be and subsequently we would be a fraud. Therefore, an authentic life becomes a higher life, a life that has achieved its goal of being uniquely itself (Elliott, 2005).

Elliott (2005) states that surgical enhancement can be a means of changing an individual's outer appearance to match her inner being, as in the case of gender reassignment surgery for a man who believes that his inner being is a woman. Similarly, Elliott gives narratives of individuals who had face-lifts, started antidepressant regimens, or participated in voice change

exercises to rid themselves of their undesirable southern accents and then began to feel like their true selves. When the idea of “discovering our true selves” is applied to cognitive enhancement, biological and nonbiological cognitive enhancement practices, such as taking psychopharmaceuticals, can be thought of changing cognition so that our outward appearance, or our personality, matches our inner being. Similarly, Elliott (2005) states that it may be appropriate to say that drugs have brought out our true self as these drugs reveal hidden parts of our personality that otherwise, to the detriment of our sense of authenticity, would have remained hidden.

Discussion

Cognitive enhancement practices can change aspects of ourselves that are essential to who we are. They can change who we are and who we desire to be. Taking this into consideration, when determining the relevant differences between cognitive enhancement at the biological level and cognitive enhancement that does not affect biology, we have to evaluate each enhancement practice based on the extent to which it can affect our ability to be the individual that we want to be. Some enhancement practices have the capability to affect cognition more than others, meaning their capability to change who we are and who we may become is greater. The differences between some cognitive enhancements can be compared to the differences between an athlete that takes synthetic testosterone to build muscle and

enhance his athletic performance and an athlete that wears clothing engineered for better athletic performance.

Judgments about the acceptability of better clothing options and drugs in professional sports typically focus on what is fair for competitors. Arguably, drugs are banned from sport because of the degree to which they can enhance performance, whereas some engineered clothing and shoes are not banned from sport because of the minimal advantage they can confer onto athletes (although some engineered clothing and shoes are banned from sport competitions). As the argument goes, the athlete who uses drugs has a greater chance of attaining victory than the athlete that does not use drugs. Conversely, the athlete that wears engineered clothing or shoes does not have an extreme advantage over athletes that do not wear engineered clothing or shoes. This argument attempts to maintain a sense of fairness, which in this instance can be viewed as equal opportunity to victory, or as much equal opportunity that can be secured by rules and regulations (see Chapter 4).

When this argument is applied to cognitive enhancing drugs and cognitive enhancement practices such as memory exercises, we can look at individuals as competitors for social goods such as jobs and education and just as athletes can be viewed as competitors for victory. Although the rules to life's success are not written and enforced like rules in sports there is some sense of what is fair in ensuring access to opportunity. If the idea behind regulation in sport is to ensure access to victory, then regulation of cognitive

enhancement practices can also be thought to have the same goal. Regulating who can have access to cognitive enhancing drugs such as Ritalin and *Adderall* can affect who has more of a chance of attaining good grades in school, admittance into universities, or access to jobs. The one major difference between access to victory in sports and access to social goods is that although social goods may be limited there can be more than one winner of those goods, unlike most professional sports in which there is only one winner.

When considering who ought to have access to cognitive enhancement practices and if there are relevant differences between biological and non-biological cognitive enhancement practices, we have to consider the advantages that can accompany the enhancement practices and whether regulation encourages or discourages fairness in access to those advantages.

Conclusion

In this chapter, I contend that individuals who are functioning normally are relevant to cognitive enhancement discourse because of the promise of elevated intellectual capabilities and the benefits to identity and social goods that cognitive enhancement practices can offer. Cognitive enhancement practices, whether biological or non biological, have the capability to confer social and financial advantages onto the individuals who participate in the practices.

It can be argued that the societal pressures create the irresistible nature of cognitive enhancements. As jobs become scarce, they also become increasingly competitive. Similarly, admittance into top universities is becoming increasingly competitive. With individuals competing for jobs and chances at higher education, practices that can give individuals an edge over their competition are tempting and difficult to resist. My goal is not to make the argument that a high-pressured society entitles individuals to cognitive enhancement practices; however, because of the benefits of cognitive enhancements, if we withhold cognitive enhancements from a particular group, we must justify these actions.

Just as physical enhancements can be tempting to athletes of varying abilities, cognitive enhancements can be irresistible to those suffering from cognitive and/or intellectual disabilities as well as those who are thought to have normal cognitive functioning and intellectual capabilities. It has been argued that the environment that athletes find themselves in contributes to their desire for physical enhancement. In fact, some have argued that the environment of sports and the demands placed on athletes entitles them to physical enhancements (Schneider, 2009).

This chapter highlights the issues of how to treat normally functioning individuals when we have the biotechnology to end the ways in which individuals suffer from their natural shortcomings. This chapter explores this issue within the context of cognitive enhancing drugs, while Part I of this

dissertation explores this issue in the context of growth hormone therapy and how the treatment/enhancement distinction influences how we view these issues. One running theme in this dissertation that is prevalent in this chapter is that the treatment/enhancement does not always match up perfectly with acceptable and unacceptable uses of medical intervention. This chapter approaches the issue by drawing the conclusion that based on the ways that cognitive enhancement practices can enhance our lives and the relatively low risks of adverse health associated with some cognitive enhancing drugs, cognitive enhancing drugs are not only acceptable as therapeutic practices, but that some uses of cognitive enhancing practices by normal functioning individuals are acceptable as well.

CHAPTER 6

CONCLUSION

This dissertation is a response to incorrect uses of the treatment/enhancement distinction. A widely held belief is that distinguishing treatment from enhancement is a matter of definition. The conclusion then may be drawn that medicine appropriately responds to circumstances in which treatment is necessary and that health care policies, such as funding decisions, should reflect this approach. Mistakenly, the treatment/enhancement distinction is employed as an objective distinction between medical intervention that is medically necessary and medical intervention that is medically unnecessary. Although the treatment/enhancement distinction can be employed in this way, the normativity of the distinction must also be acknowledged if the treatment/enhancement distinction is to serve as a somewhat useful tool in arguments of distributive justice.

Additionally, it must be acknowledged that the treatment/enhancement distinction is much more complex than definitions

and policies. Based on the ethical implications of health care decisions, such as the potential to unjustifiably withhold medical intervention from some individuals, the applicability of the treatment/enhancement distinction should be recognized as more complex than definitions and policies based on those definitions. When deciding who is not allowed to have use of medical resources, health care personnel owe individuals thoughtful justification for policies on the allocation of medical resources.

In this dissertation, I contend that a part of acknowledging the normative nature of the treatment/enhancement distinction is acknowledging that arguments that utilize the treatment/enhancement distinction, a conceptual distinction between medical practices that are considered treatment and medical practices that are considered enhancement, rely on explanations of concepts such as normality human functioning, health, or disease to draw conclusions about medical intervention. Given this contention, I examine the treatment/enhancement distinction within the context of growth hormone therapy, cognitive enhancement practices, and performance enhancing drugs.

Arguments

In this section, I review the arguments that I examine throughout this dissertation to draw my conclusions about the normative concepts on which the treatment/enhancement distinction relies. I contend that proponents of

enhancement practices have to address these arguments. Additionally, I show how these arguments concern abnormally functioning and normally functioning individuals.

Natural Inequalities

Showing concern for normally functioning individuals and questioning the understood entitlement to enhancement practices for the abnormally functioning individuals is not an egalitarian agenda. Showing concern for normally functioning individuals is not an attempt to equalize everyone's talents. Justice in health care does not require that everyone's talents be equalized; however, it does require nonarbitrary and justified policies for withholding enhancement practices, and thus their benefits, from certain individuals. This is especially necessary when enhancement practices are concerned because of the potential economic and professional opportunities they can confer upon individuals. Therefore, if certain practices are not available to normal individuals by virtue of those practices being viewed as enhancement practices, then as a matter of justice in health care, we must explain our reasoning for withholding these practices.

Buchanan and others (2000) state that not all inequalities ought to be a concern of distributive justice in the case that we do not have the biotechnology to enhance individuals' minds and bodies. However, now that we have the means to modestly enhance our being and promising

biotechnology to significantly enhance our being, at the minimum, we have to reconsider our treatment of natural inequalities in a scheme of just distribution of enhancement. A reconsideration of just how we ought to treat natural inequalities in terms of distributing enhancements is necessary because we have the opportunity to remedy certain inequalities and eliminate the ways in which we are hindered by those inequalities. If we can eliminate or even lessen the ways that our natural inequalities affect our lives then we can become better competitors for opportunities.

Traditionally, the viewpoint is that it is acceptable for abnormally functioning individuals to use enhancement practices in an attempt to raise themselves to levels of normality. However, improperly balancing the interests of normal and abnormally functioning individuals poses the biggest threat to justice for the normally functioning individuals who seek enhancement. Taking it for granted that normally functioning individuals are not entitled to enhancement practices and that abnormally functioning individuals are entitled to enhancement practices also poses a problem for at least maintaining equal consideration of normally functioning individuals.

Social and Professional Environments

The nature of particular social and professional settings is another argument that can be seen throughout this dissertation. For example, in Chapter 4, I acknowledge the argument that the evolution of professional

sports encourages performance enhancing drug use. Professional sports involve sponsors, the sale of merchandise, spectators' increasing expectations of sportsmanship and entertainment, and increasing financial gains with victories. As a result of these components of professional sports, some athletes have claimed that the nature of sports requires drug use. As the argument continues, sports require human abilities that individuals can only acquire with the help of performance enhancing drugs (Donovan 2011).

This argument can also be seen in Chapter 5. Concerning cognitive enhancing drugs, I also acknowledge the argument that the increasingly competitive nature of college admissions and jobs and the increasing demands on our time create an environment that makes normal and abnormally functioning individuals susceptible to the promises of cognitive enhancing drugs.

Acceptable and Unacceptable Risks

There are risks associated with almost all uses of medical practices. When examining proper and improper uses of enhancement practices, we also have to discuss the risks that these practices pose to normal and abnormally functioning individuals who use the practices. For example, in Chapter 3, I discuss how the risks of GH therapy are typically viewed as acceptable in instances of GHD or other diseases, otherwise known as abnormal functioning, while the risks of GH therapy are typically viewed as

unacceptable in instances when children are functioning normally. Diagnosis-based arguments rely on the idea that the treatment/enhancement distinction is also a distinction between acceptable and unacceptable risks. However, in Chapter 3, I argue that the risks of GH therapy may be acceptable for parents of normally functioning children to take for their children in the instance that their children are extremely short and GH therapy is expected to be reasonably safe and effective.

I also examine the risks of enhancement practices in Chapters 4 and 5 in regard to cognitive enhancing drugs and athletic performance enhancing drugs, respectively. The acceptability of risks in these contexts is discussed in relation to fairness in competition and how drug use by some individuals affect individuals who do not desire to take drugs. I also discuss how explanations of concepts like disease and health determine acceptability of medical intervention, and not the treatment/enhancement distinction.

Natural inequalities, social and professional environments, and acceptable and unacceptable risks (and others) are all arguments that I discuss throughout this dissertation to support the contention that the treatment/enhancement distinction does not motivate arguments that draw conclusions about justice in health care. These arguments show that determining who ought to be allowed to use enhancement practices and for what purposes requires more than the treatment/enhancement distinction. Furthermore, these arguments show that the treatment/enhancement

distinction is not always synonymous with acceptable and unacceptable intervention or risks.

Implications for Justice in Health Care

What follows are the main conclusions drawn in this dissertation:

- 1) The treatment/enhancement distinction is not an independent concept.
- 2) Arguments concerning justice in health care that draw conclusions about how to allocate resources based on what practices are treatment and what practices are enhancement must rely on normative accounts of concepts such as health, disease, normality, and human functioning.
- 3) The treatment/enhancement distinction is not always synonymous with acceptable and unacceptable intervention.
- 4) As a matter of justice in health care, arguments concerning the allocation of enhancement practices have to consider the needs of normally functioning individuals as well as abnormally functioning individuals because of the potential benefits of enhancement practices.

These conclusions have practical implications for justice in health care.

Relying on these conclusions, the relevance of the treatment/enhancement distinction in decisions concerning allocation of resources must be

diminished. Instead, health care professionals have to examine the concepts on which they rely to make allocation decisions. If decisions about health care intervention that rely on explanations of concepts like health, disease, and human functioning prevent normally functioning individuals who suffer from their ailments in the same ways that abnormally functioning individuals suffer from their ailments, then we have to reconsider our decisions.

The treatment/enhancement distinction is not a static concept. We must be willing to alter the role of the treatment/enhancement distinction because of the possible ways that enhancement practices can change our lives. Enhancement practices are capable of helping us accomplish our career and personal goals. They are capable of helping us to be the individual that we want to be—physically, emotionally, and intellectually. Because of the known benefits of current enhancement practices, and the promise of future enhancement practices, we have to be delicate in our deliberations about entitlements to enhancement practices and the obligations of its gatekeepers.

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